PART B

SOLAR - GEOPHYSICAL DATA

ISSUED

AUGUST 1962

U. S. DEPARTMENT OF COMMERCE
NATIONAL BUREAU OF STANDARDS
CENTRAL RADIO PROPAGATION LABORATORY
BOULDER, COLORADO

CRPL-F 216
PART B

NATIONAL BUREAU OF STANDARDS
CENTRAL RADIO PROPAGATION LABORATORY
BOULDER, COLORADO

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SOLAR - GEOPHYSICAL DATA

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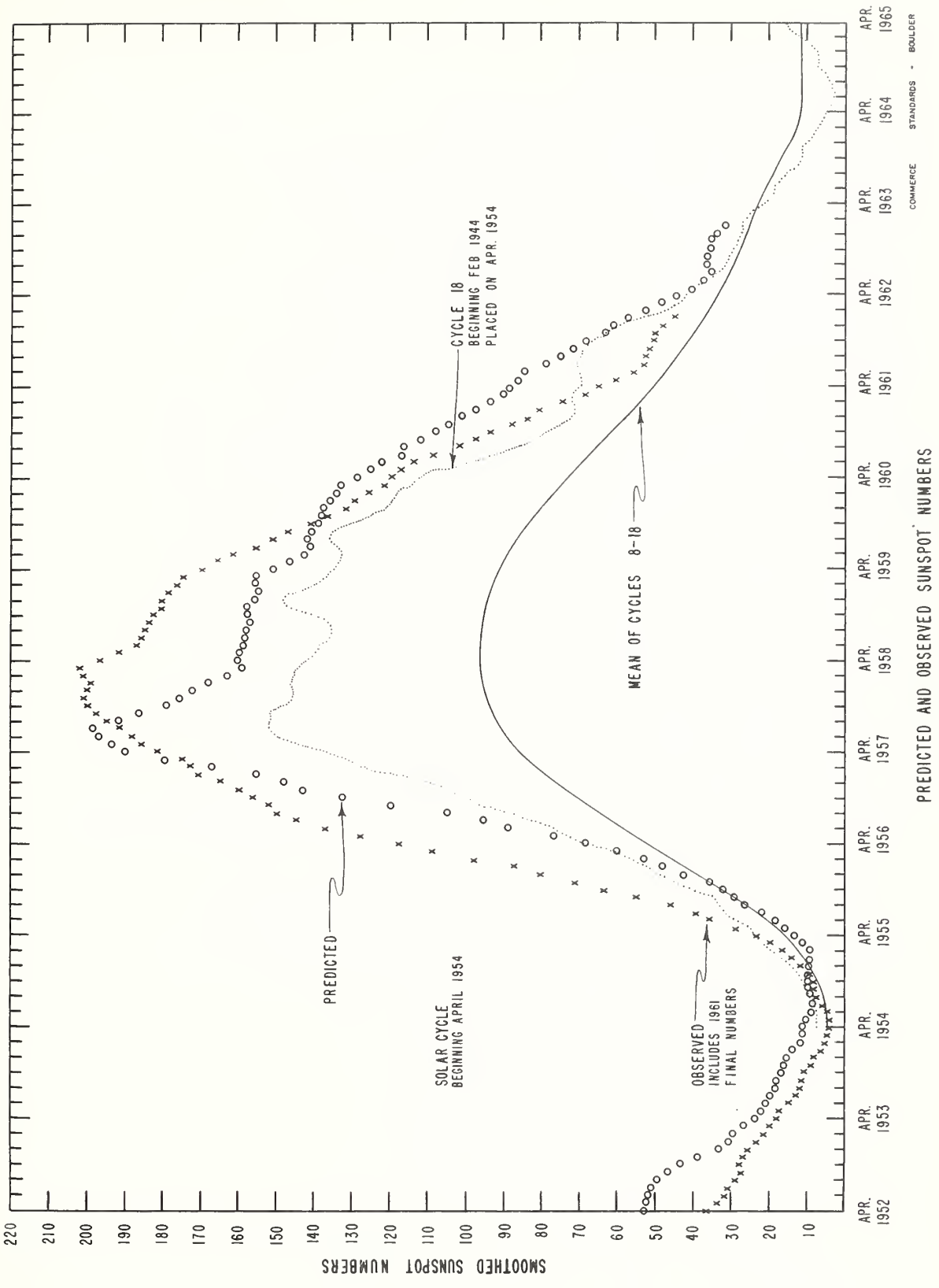
The descriptive text was republished November 1961.
Addenda to the text were published February 1962.

DAILY SOLAR INDICES

June 1962	American Relative Sunspot Numbers R_A'
1	21
2	17
3	4
4	2
5	11
6	31
7	30
8	29
9	38
10	33
11	35
12	25
13	27
14	44
15	45
16	48
17	59
18	57
19	60
20	41
21	32
22	27
23	22
24	30
25	30
26	35
27	30
28	31
29	37
30	43
Mean:	32.5

July 1962	Zürich Provisional Relative Sunspot Numbers R_Z	Daily Values Solar Flux at 2800 Mc, Ottawa, Canada Flux
1	54	*
2	39	*
3	38	*
4	30	90
5	26	88
6	20	86
7	21	88
8	16	83
9	10	80
10	13	81
11	19	83
12	11	82
13	29	86
14	33	86
15	21	85
16	26	84
17	31	84
18	23	82
19	8	80
20	14	80
21	23	79
22	23	80
23	17	78
24	13	78
25	11	74
26	9	76
27	9	74
28	9	74
29	8	73
30	7	72
31	0	73
Mean:	19.7	80.7

* No observations - equipment breakdown.


SMOOTHED SUNSPOT NUMBERS
220
210
200
190
180
170
160
150
140
130
120
110
100
90
80
70
60
50
40
30
20
10
APR. 1952
APR. 1953
APR. 1954
APR. 1955
APR. 1956
APR. 1957
APR. 1958
APR. 1959
APR. 1960
APR. 1961
APR. 1962
APR. 1963
APR. 1964
APR. 1965
PREDICTED
SOLAR CYCLE
BEGINNING APRIL 1954
OBSERVED
INCLUDES 1961
FINAL NUMBERS
MEAN OF CYCLES 8-18
CYCLE 18
BEGINNING FEB 1944
PLACED ON APR. 1954
PREDICTED AND OBSERVED SUNSPOT NUMBERS
COMMERCE STANDARDS - BOULDER

CALCIUM PLAGE AND SUNSPOT REGIONS

JULY 1962

CMP July 1962	Lat	McMath Plage Number	Return of Region	Calcium Plage Data			Sunspot Data		
				CMP Values Area	Int.	History, Age	CMP Values Area	Count	History
01.2	S20	6466	6432	2300	3	ℓ — ℓ 3	60	5	ℓ ⟍ ℓ
02.5	N09	6467	6436	600	1	ℓ — ℓ 2			
03.4	N05	6469	6436	300	1.5	b ⟋⟍ d 2			
03.4	S03	6471	New	400	1	b ⟋ ℓ 1			
04.4	S09	6470	New	200	2	ℓ — ℓ 1			
06.4	N20	6478	*	200	2	b ⟋⟍ d			
07.3	N07	6485	New	(200)	(2)	b ⟋ ℓ 1			
08.1	S10	6472	6441	1600	2	ℓ — ℓ 4			
08.2	N16	6475	6443	600	1.5	b ⟋⟍ d 7			
08.4	N08	6479	*	600	2	b ⟋⟍ d			
09.2	N17	6474	6443	(400)	(1.5)	ℓ ⟍ d 7			
10.9	N17	6476	6447	800	1.5	ℓ — ℓ 7			
11.4	N01	6490	New	(200)	(2.5)	b ⟋ ℓ 1			
11.6	S12	6477	6445	1400	2.5	ℓ — ℓ 2			
12.7	N09	6480	6452	2300	3	ℓ — ℓ 2	320	1	ℓ — ℓ
13.2	N23	6481	6451	1000	2	ℓ — ℓ 7			
13.6	S14	6482	6455	500	1.5	ℓ — ℓ 2			
14.2	N12	6487	6453	300	1	ℓ ⟍ d 3			
15.2	N01	6496	New	(200)	(1.5)	b ⟋ ℓ 1			
15.5	N16	6486	New	300	1	ℓ — ℓ 1			
16.9	N06	6488	6465	400	1	ℓ ⟍ d 2			
17.2	S09	6491	New	400	2	ℓ — ℓ 1			
20.1	N18	6492	**	3200	3	ℓ — ℓ 4			
20.6	S09	6493	6460	900	2.5	ℓ ⟋ ℓ 4	20	2	b ⟋⟍ d
21.1	N07	6495	New	700	2.5	b ⟋ ℓ 1			
22.5	N06	6494	New	1400	3	ℓ — ℓ 1	10	1	b ⟋⟍ d
27.4	N03	6497	6463	1500	3	ℓ — ℓ 2	40	4	ℓ ⟍ d
27.6	S06	6499	6463	500	2.5	ℓ — ℓ 2	50	3	b ⟋⟍ d
29.2	S20	6501	New	200	2.5	b ⟋⟍ d 1			
29.8	N12	6500	6467	(400)	(1.5)	ℓ — ℓ 3			

* New and ephemeral

** 6458, 6459

Erratum: In the June 1962 Calcium Plage and Sunspot Region Table published in CRPL-F 215B for July 1962, page IIa, add the following data:

19.9	N05	6465	New	(600)	(3)	b ⟋ ℓ 1		

MT. WILSON MAGNETIC CLASSIFICATIONS OF SUNSPOTS

JULY 1962

July 1962	Time Meas.	Lat.	Mer. Dist.	Type		July 1962	Time Meas.	Lat.	Mer. Dist.	Type
1	2355	S00	W21	βp*		15	1625	N09	W40	αp
		S22	W07	βp				N11	W35	β
								N12	E58	αp
2	1630	S00	W29	βp*						
		S22	W18	βp		16	2350	N10	W57	αp
								N13	W48	αf
5	1600	S00	W69	βp*						
		S22	W59	αp		17	1730	N10	W68	αp
								S11	W55	αp
7	1735	N10	E63	αp				N04	E58	αp
8	2355	N10	E48	αp		18	1645	N10	W79	αp
								N06	E47	βp**
9	1840	N09	E38	αp						
						23	2318	N01	E42	αp
10	2315	N09	E22	αp						
						24	1545	N01	E34	αp
11	1720	N18	W06	αf						
		N09	E12	βp		27	2400	N01	W06	βp
13	1635	N10	W13	αp		28	2230	N01	W19	βp
		N12	W07	β						
		S15	E46	β		29	2320	N00	W35	αp
14	2330	N00	W50	α *						
		N09	W30	αp						
		N11	W25	β						
		S12	E27	αp						

COMMERCE - STANDARDS - BOULDER

* Polarities normal for Northern Hemisphere.
** Polarities Reversed for this Hemisphere.

FINAL CORONAL LINE EMISSION INDICES

APRIL 1962

CMP Apr 1962	North East Quadrant (observed 7 days earlier)				South East Quadrant (observed 7 days earlier)				South West Quadrant (observed 7 days later)				North West Quadrant (observed 7 days later)			
	G_6	G_1	R_6	R_1	G_6	G_1	R_6	R_1	G_6	G_1	R_6	R_1	G_6	G_1	R_6	R_1
1	42	102	7	12	29	62	16	22	47	87	34	52	51	77	22	32
2	20	53	8a	14a	14	36	12a	18a	18	36	x	x	24	63	x	x
3	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x
4	4	14	22a	36a	5	8	18a	24a	x	x	5	8	x	x	16	28
5	7	8	6	7	5	8	3	5	12	20	31	39	22	39	18	24
6	x	x	x	x	x	x	x	x	7	11	8	9	15	17	10	16
7	3	4	11	15	3	4	14	16	4	8	8	10	6	8	9	10
8	9	11	25	25	6	6	21	22	2	8	21	31	9	14	43	57
9	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x
10	20	23	13	19	16	21	18	28	x	x	x	x	x	x	x	x
11	x	x	x	x	x	x	x	x	15	39	12	16	14	25	19	27
12	x	x	x	x	x	x	x	x	6a	8a	6	8	18a	25a	4	6
13	27	28	7	10	18	23	11	18	6	17	5	8	24	45	6	10
14	40	48	13	14	36	57	13	16	x	x	x	x	x	x	x	x
15	61	74	16	27	32	62	13	16	x	x	x	x	x	x	x	x
16	11	22	x	x	34	42	x	x	18	45	6	9	57	76	4	7
17	x	x	x	x	x	x	x	x	29	78	6	13	101	118	15	25
18	x	x	10	14	x	x	15	18	31	70	8	21	84	109	16	30
19	83	124	57	90	38	87	29	54	x	x	x	x	x	x	x	x
20	118	193	18	28	54	90	12	25	x	x	x	x	x	x	x	x
21	61	98	13	30	59	98	9	18	36	73	22	39	50	76	16	22
22	59	90	20	32	39	76	19	28	49	81	19	45	64	110	15	24
23	x	x	x	x	x	x	x	x	35	54	5	10	55	97	1	4
24	x	x	x	x	x	x	x	x	8	17	11	13	28	36	7	9
25	21	25	12	16	9	11	14	18	24a	36a	x	x	12a	17a	x	x
26	40	48	8	21	26	34	7	13	x	x	x	x	x	x	x	x
27	25	50	2	4	14	22	8	14	x	x	x	x	x	x	x	x
28	x	x	x	x	x	x	x	x	17	22	x	x	53	174	x	x
29	x	x	x	x	x	x	x	x	17	38	13	28	49	59	10	12
30	28	42	13a	20a	14	31	11a	20a	x	x	x	x	x	x	x	x

x = no observations a = index computed from low weight data * = yellow line observed

FINAL CORONAL LINE EMISSION INDICES

MAY 1962

CMP May 1962	North East Quadrant (observed 7 days earlier)				South East Quadrant (observed 7 days earlier)				South West Quadrant (observed 7 days later)				North West Quadrant (observed 7 days later)			
	G_6	G_1	R_6	R_1	G_6	G_1	R_6	R_1	G_6	G_1	R_6	R_1	G_6	G_1	R_6	R_1
1	49	134	17	21	16	39	5	6	x	x	x	x	x	x	x	x
2	37	87	21	33	9	25	11	17	22	37	58a	74a	56	84	57a	77a
3	63	119	x	x	21	36	x	x	15	21	8	10	37	48	17	21
4	x	x	x	x	x	x	x	x	6	6	19	24	15	22	30	54
5	8	11	25	33	3	6	22	36	10	25	6	7	25	53	9	13
6	17	21	17	18	10	11	11	14	5	8	8	14	2	2	16	36
7	13	19	8a	10a	19	24	11a	12a	20	34	21a	26a	9	12	25a	40a
8	14	20	10	11	7	11	13	16	6	14	x	x	18	31	x	x
9	24a	36a	x	x	12a	17a	x	x	23	32	22	35	45	86	7	12
10	27a	59a	x	x	8a	11a	x	x	10	17	10a	20a	51	120	8a	10a
11	3a	4a	x	x	0a	0a	x	x	7	9	11	16	45	84	19	56
12	54	112	x	x	17	36	x	x	13	20	32	40	43	64	31	38
13	60	82	13	17	17	26	12	18	19	37	9	14	42	58	4	9
14	x	x	x	x	x	x	x	x	19	55	5	10	18	42	8	14
15	x	x	x	x	x	x	x	x	22	51	9	10	38	55	5	12
16	89	132	57a	108a	54	80	48a	98a	46	76	7	9	65	101	11	26
17	99	164	15	28	60	102	28	49	38	70	7	8	127	201	18	40
18	86	148	28	82	56	90	18	20	30	37	x	x	38	46	x	x
19	60	115	8	13	28	59	4	9	14	20	x	x	18	20	x	x
20	12	14	0	0	9	14	4	6	16	25	8	10	25	33	2	2
21	23	26	20a	36a	13	16	22a	25a	14	23	1	3	34	41	6	12
22	16	22	x	x	8	11	x	x	4	8	11	16	22	42	16	40
23	48	84	8	10	26	42	14	20	12	20	x	x	32	53	x	x
24	34	70	3a	5a	8	14	2a	2a	14	20	5	8	43	52	5	7
25	37	75	14	28	6	9	10	12	8	21	16	22	31	34	6	10
26	72	126	33	57	19	31	12	16	31	59	6	11	71	179	12	26
27	87	171	12	22	39	76	6	7	51	92	25	36	118	244	31	44
28	34	53	8	12	9	18	11	16	28	50	10	15	65	174	11	17
29	30	46	11	28	7	15	11	18	0a	1a	1a	2a	1a	1a	1a	1a
30	33	50	7	11	10	14	9	14	x	x	x	x	x	x	x	x
31	12	22	14	24	14	30	31	34	4	6	7	10	6	7	4	4

x = no observations a = index computed from low weight data * = yellow line observed

FINAL CORONAL LINE EMISSION INDICES

JUNE 1962

CMP Jun 1962	North East Quadrant (observed 7 days earlier)				South East Quadrant (observed 7 days earlier)				South West Quadrant (observed 7 days later)				North West Quadrant (observed 7 days later)			
	G_6	G_1	R_6	R_1	G_6	G_1	R_6	R_1	G_6	G_1	R_6	R_1	G_6	G_1	R_6	R_1
1	10	15	4	8	7	9	4	6	x	x	x	x	x	x	x	x
2	7	12	x	x	17	26	x	x	30	70	30	50	14	34	36	42
3	18	28	3	5	29	60	0	1	24	45	48a	85a	9	14	44a	66a
4	18	26	8	12	26	70	15	30	23a	34a	45a	89a	10a	11a	56a	120a
5	7	15	21	48	6	16	23	32	20	26	7	13	30	56	5	13
6	43	73	x	x	22	53	x	x	4	8	6	7	9	16	5	7
7	51	95	4	6	19	48	7	13	1a	2a	7a	12a	34a	76a	17a	20a
8	1	3	9	10	0	0	8	10	6a	14a	3a	5a	13a	28a	4a	5a
9	29	45	3	7	23	53	7	9	23	61	5	20	17	27	2	8
10	43	59	12	17	53	120	27	60	43	98	7	12	27	36	5	8
11	56	87	4	10	48	115	7	19	52	135	7	11	55	98	3	6
12	1a	2a	0a	0a	1a	5a	1a	2a	40	62	29	48	47	62	15	28
13	x	x	x	x	x	x	x	x	51	87	6	15	77	134	6	22
14	22	28	16	44	17	27	5	8	59	115	10	29	71	126	0	0
15	62	109	2a	4a	24	34	1a	4a	45	91	6	16	62	85	1	3
16	70	120	34	68	17	20	20	48	61	103	6	11	86	132	4	11
17	43	87	19a	28a	5	8	22a	24a	x	x	x	x	x	x	x	x
18	42	62	10a	16a	9	14	21a	28a	19	27	6	13	39	78	0	0
19	77	112	5	7	24	44	5	6	8	14	3	4	36	64	3	8
20	6	8	4	5	2	4	4	7	6	14	33a	43a	27	31	36a	52a
21	38a	53a	14a	16a	14a	17a	9a	18a	4a	12a	7a	7a	27a	50a	4a	5a
22	38a	64a	4a	10a	3a	6a	4a	7a	32	63	x	x	87	158	x	x
23	53	87	9	22	18	45	9	22	35	65	10	20	70	103	4	15
24	61	112	11	42	29	67	9	26	33	62	16a	32a	45	67	9a	20a
25	37	73	14a	24a	18	36	14a	18a	32	42	5	9	27	48	3	10
26	23	39	32	88	8	11	32	50	9	11	6	10	18	28	6	7
27	16	25	11	29	8	11	0	0	3	3	8a	10a	6	8	10a	20a
28	9	17	6	10	8	14	2	6	2	3	x	x	5	11	x	x
29	11	22	5	11	15	22	4	6	25	28	6	17	13	21	8	14
30	25	78	7	11	42	62	5	14	41	54	x	x	9	38	x	x

x = no observations a = index computed from low weight data * = yellow line observed

PROVISIONAL CORONAL LINE EMISSION INDICES

JULY 1962

CMP Jul 1962	North East Quadrant (observed 7 days earlier)				South East Quadrant (observed 7 days earlier)				South West Quadrant (observed 7 days later)				North West Quadrant (observed 7 days later)			
	G_6	G_1	R_6	R_1	G_6	G_1	R_6	R_1	G_6	G_1	R_6	R_1	G_6	G_1	R_6	R_1
1	x	x	x	x	x	x	x	x	35	81	17	40	27	50	21	40
2	15	54	25a	72a	9	20	45a	81a	x	x	x	x	x	x	x	x
3	37	104	16a	28a	17	25	19a	23a	4a	6a	3a	4a	12a	25a	4a	6a
4	16	28	13a	16a	5	8	14a	18a	6	8	8a	14a	24	36	9a	22a
5	10a	20a	4a	5a	3a	4a	6a	7a	x	x	8a	10a	x	x	9a	10a
6	x	x	x	x	x	x	x	x	27	64	9a	16a	21	22	6a	18a
7	x	x	x	x	x	x	x	x	35	78	7a	8a	21	25	6a	8a
8	33	42	4a	8a	48	95	10a	12a	17	36	8	10	22	34	6	7
9	39	59	6a	17a	28	48	6a	7a	30	39	8a	11a	28	39	4a	6a
10	70	137	6a	22a	38	70	6a	20a	x	x	x	x	x	x	x	x
11	52	67	13a	28a	44	92	10a	44a	35	53	x	x	45	56	x	x
12	61	87	x	x	44	93	x	x	x	x	x	x	x	x	x	x
13	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x
14	29	38	x	x	22	48	x	x	x	x	x	x	x	x	x	x
15	26	36	6	10	12	17	11	18	5	8	15	17	10	14	7	10
16	x	x	x	x	x	x	x	x	3	6	13	15	4	4	7	10
17	9a	30a	7a	12a	4a	6a	3a	4a	x	x	x	x	x	x	x	x
18	33	53	6a	12a	12	17	14a	16a	x	x	x	x	x	x	x	x
19	x	x	14a	28a	x	x	22a	30a	x	x	x	x	x	x	x	x
20	71	101	3a	4a	21	48	13a	18a	27a	45a	11a	31a	65a	81a	3a	4a
21	54	67	8	16	21	48	9	12	12	22	17a	25a	56	95	11a	20a
22	36	70	8	15	7	14	7	7	4	8	x	x	31	62	x	x
23	19	34	x	x	5	8	x	x	3a	8a	11a	17a	3a	6a	9a	15a
24	x	x	x	x	x	x	x	x	3	4	8	10	5	8	10	20
25	12	22	x	x	8	11	x	x	11	20	18a	24a	9	14	18a	38a
26	x	x	x	x	x	x	x	x	33	53	10a	16a	18	53	16a	30a
27	x	x	x	x	x	x	x	x	15	28	x	x	4	10	x	x
28	x	x	x	x	x	x	x	x	4	6	9	18	18	31	11	17
29	8	12	12	30	6	10	11	17	9	11	8a	17a	16	17	8a	12a
30	17	40	15	35	5	10	8	10	3	4	5	5	4	6	5	10
31	x	x	x	x	x	x	x	x	2	2	x	x	4	6	x	x

COMMERCE - STANDARDS - BOULDER

x = no observations a = index computed from low weight data * = yellow line observed

SOLAR FLARES

JULY 1962

OBSERVATORY	DATE JULY 1962	OBSERVED UNIVERSAL TIME START	END	MAX PHASE	LOCATION APPROX LAT.	MER DIST	McMATH PLAGE REGION	DURATION — MINUTES	IMPORTANCE	OBS COND	MEASUREMENTS TIME — U T	MEAS AREA Sq Deg	CORR AREA Sq Deg	MAX WIDTH Ha	MAX INT %	PROVISIONAL IONOSPHERIC EFFECT
	01	0030	0050	NO FLARE	PATROL											
	01	0145	0210	NO FLARE	PATROL											
	01	0315	0430	NO FLARE	PATROL											
	01	1605	1825	NO FLARE	PATROL											
	01	2210	2220	NO FLARE	PATROL											
LOCKHEED	01	2345	2354	2347	N00	W21			1-		2347	.30	.30		20	
	02	0000	0500	NO FLARE	PATROL											
HTE-PROVEN	02	1350	1405		N00	W28			1-							
	02	1805	1815	NO FLARE	PATROL											
	02	1820	1835	NO FLARE	PATROL											
	02	1850	1855	NO FLARE	PATROL											
	02	1940	1950	NO FLARE	PATROL											
	02	2330	2400	NO FLARE	PATROL											
	03	0000	0440	NO FLARE	PATROL											
ATHENES	03	0835 E	0845		N03	W40			1-	2		.40	.50			
LOCKHEED	03	2100	2114	2104	N01	W50			1-	2	2104	.40	.50		20	
HONOLULU	03	2102	2112	2104	S01	W51			1-	2	2104	.52	.68			
	03	2230	2255	NO FLARE	PATROL											
	03	2315	2350	NO FLARE	PATROL											
	04	0115	0120	NO FLARE	PATROL											
	04	0125	0130	NO FLARE	PATROL											
	04	0150	0250	NO FLARE	PATROL											
	04	0305	0605	NO FLARE	PATROL											
SAC PEAK	04	1451	1500 D	1455	N02	W55			1-	1		.14	.17		17	
MCMATH	04	1626	1632	1628	N00	W57	6463		1-	1	1628	.80	1.50			
LOCKHEED	04	2004	2024	2011	N04	W58			1-	2	2011	.40	.60		10	
LOCKHEED	04	2209	2231	2215	N01	W60			1-	2	2215	.50	.80		10	
MCMATH	04	2211	2222	2215	N02	W60	6463		1-	2	2215	.70	1.40			
	04	2305	2400	NO FLARE	PATROL											
	05	0000	0500	NO FLARE	PATROL											
ATHENES	05	0624	0629 D		S02	W62			1-	1		.30	.50			
ATHENES	05	0819 E	0830		S09	W32			1-	3		.30	.40			
ISTANBUL	05	0830 E	0845		S02	W32	6471	15 D	1							
CAPRI S	05	1103 E	1111 D		N02	W70			1-	3	1105	.30	1.00			
MCMATH	05	1716	1728	1722	N01	W71	6463		1-	2	1722	.40	1.00			Slow S-SWF
MCMATH	05	1853	1906		N03	W73	6463		1-	1	1903	.20	.60			
MCMATH	05	1932	2003		N03	W75	6463	31	1+	1	1939	1.00	4.00			
HUANCAYO	05	1933	1947	1939	N03	W68	6463	14	1	2	1935	1.50	3.70	6.10		Slow S-SWF
LOCKHEED	05	1935	1957	1942	N05	W71	6463	22	2	2	1942	2.50	5.00		20	
LOCKHEED	05	2038	2048	2043	S20	W56			1-	2	2043	.40	.60		10	
MCMATH	05	2039	2045	2041	S22	W59	6466		1-	2	2041	.30	.60			
HONOLULU	05	2042 E	2048	2042	S22	W59			1-	1	2042	.62	.99			
MCMATH	05	2048	2111	2100	N04	W74	6463		1-	2	2049	.10	.50			
MCMATH	05	2048	2111	2049	N04	W74			1-							
	05	2305	2315	NO FLARE	PATROL											
	05	2355	2400	NO FLARE	PATROL											
	06	0000	0015	NO FLARE	PATROL											

SOLAR FLARES

JULY 1962

OBSERVATORY	DATE JULY 1962	OBSERVED UNIVERSAL TIME START	END	MAX. PHASE	LOCATION APPROX. LAT.	MER. DIST.	McMATH PLAGE REGION	DURATION — MINUTES	IMPORTANCE	OBS. COND.	MEASUREMENTS TIME U T	MEAS. AREA Sq. Deg.	CORR. AREA Sq. Deg.	MAX. WIDTH Ha	MAX INT. %	PROVISIONAL IONOSPHERIC EFFECT
	06	0040	0430	NO FLARE	PATROL											
CAPRI S	06	0600 E	0618		N07	E90			1-	2	0600	.60				
CAPRI S	06	0643 E	0652		S20	W65	6466	9 D	1	3	0647	.80	2.10			
ATHENES	06	0645	0657		S28	W63	6466	12	1	2		1.30	2.80			
MCMATH	06	1942 E	1948 D	1943	S04	W47	6471		1-	2	1943	.30	.50			
LOCKHEED	06	2244	2254	2247	N08	E80			1-	2	2247	.30	.90		20	
MCMATH	06	2244	2255	2247	N06	E80	6480		1-	2	2247	.50	1.80			
	06	2300	2325	NO FLARE	PATROL											
	07	0025	0030	NO FLARE	PATROL											
	07	0050	0500	NO FLARE	PATROL											
MCMATH	07	1438	1453	1442	N11	E68	6480		1-	2	1442	.30	.60			
SAC PEAK	07	1438	1457	1442	N12	E68			1-	2		.43	.72		17	
SAC PEAK	07	1820	1850	1827	S12	E54			1-	2		.21	.29		16	
	07	2320	2330	NO FLARE	PATROL											
	08	0000	0440	NO FLARE	PATROL											
HTE-PROVEN	08	1535	1610		N12	E54			1-							
SAC PEAK	08	1537	1551	1548	N12	E55			1-	3		.87	1.16		17	
SAC PEAK	08	1537	1551	1542	N12	E55			1-							
MCMATH	08	1537	1615	1545	N14	E54	6480		1-	2	1545	.80	1.40			
WENDEL	08	1540	1604		N13	E50	6480	24	1+				5.00			
	08	1800	1825	NO FLARE	PATROL											
	08	1850	1905	NO FLARE	PATROL											
	08	2230	2245	NO FLARE	PATROL											
	08	2335	2340	NO FLARE	PATROL											
	09	0010	0025	NO FLARE	PATROL											
	09	0200	0435	NO FLARE	PATROL											
WENDEL	09	1039 E	1049 D		N08	E41			1-							
	10	0045	0100	NO FLARE	PATROL											
	10	0150	0430	NO FLARE	PATROL											
HTE-PROVEN	10	1426	1435		N09	E28			1-							
	10	2300	2400	NO FLARE	PATROL											
LOCKHEED	10	2321	2345	2326	N11	E15	6480	24	1	2	2326	2.40	2.40		10	
	11	0000	0100	NO FLARE	PATROL											
	11	0115	0545	NO FLARE	PATROL											
HTE-PROVEN	11	0654	0703		N10	E19			1-							
HTE-PROVEN	11	0945	1045 D		N09	E20			1-							
MCMATH	11	1328	1333	1330	N09	E16	6480		1-	3	1330	.20	.20			
MCMATH	11	1405	1420	1410	N08	E50			1-		1410	.30	.60			
CAPRI S	11	1501 E	1530		N12	E12	6480	29 D	1	3	1513	2.30	2.40			
SAC PEAK	11	1502	1520	1505	N12	E12			1-	3		.87	.85		17	
HTE-PROVEN	11	1502	1530	1506	N11	E14			1-		1506	1.40	1.50			
MCMATH	11	1503	1530	1507	N14	E12	6480		1-	2	1507	1.20	1.30			
LOCKHEED	11	2146	2152	2148	N13	E17			1-	2	2148	.40	.40		20	
MCMATH	11	2148	2156	2150	N13	E08	6480		1-	2	2150	.30	.30			
HONOLULU	11	2150 E	2154		N12	E08	6480	4 D	1	. 1	2150	3.70	3.70			
LOCKHEED	11	2200	2217	2205	N16	E12			1-	2	2205	.60	.60		20	

SOLAR FLARES

JULY 1962

OBSERVATORY	DATE JULY 1962	OBSERVED UNIVERSAL TIME START	END	MAX PHASE	LOCATION APPROX LAT	MER DIST.	McMATH PLAGE REGION	DURATION — MINUTES	IMPORTANCE	OBS. COND.	MEASUREMENTS TIME — U T	MEAS AREA Sq Deg	CORR AREA Sq Deg	MAX WIDTH Ha	MAX INT %	PROVISIONAL IONOSPHERIC EFFECT
MCMATH	11	2201	2212	2206	N15	E10	6480		1-	2	2206	1.10	1.20			
	11	2245	2355	NO FLARE	PATROL											
	12	0005	0420	NO FLARE	PATROL											
HTE-PROVEN	12	0757	0805		N10	E12			1-							
HTE-PROVEN	12	0902	0910		N10	E11			1-							
HTE-PROVEN	12	1049	1055		N10	E10			1-							
HTE-PROVEN	12	1239	1250		N10	E09			1-							
MCMATH	12	1339	1400		N12	E08	6480		1-	2	1350	.20	.20			
HTE-PROVEN	12	1344	1358 D		N10	E09			1-							
	12	1835	1925	NO FLARE	PATROL											
MCMATH	12	2015 E	2100 D		N12	E05	6480		1-	1	2030	.20	.20			
	12	2245	2400	NO FLARE	PATROL											
MCMATH	12	2250 E	2314 D		N12	E05	6480		1-	1	2300	.20	.20			
	13	0000	0205	NO FLARE	PATROL											
	13	0210	0235	NO FLARE	PATROL											
	13	0305	0510	NO FLARE	PATROL											
	13	0515	0555	NO FLARE	PATROL											
ATHENES	13	0615 E	0650		S18	E54			1-	2		.70	1.10			
CAPRI S	13	0647 E	0720 D		N12	W01			1-	3	0710	1.00	1.00			
HTE-PROVEN	13	0925	0940		N11	W05			1-							
HTE-PROVEN	13	0951	0959		N11	W04			1-							
HTE-PROVEN	13	1015	1019		N11	W04			1-							
HONOLULU	13	2018	2028	2022	N07	W18			1-	2	2022	1.86	1.86			
	14	0205	0520	NO FLARE	PATROL											
	14	1740	1800	NO FLARE	PATROL											
	15	0025	0035	NO FLARE	PATROL											
	15	0110	0115	NO FLARE	PATROL											
	15	0130	0255	NO FLARE	PATROL											
HTE-PROVEN	15	0522	0545		N11	W32			1-							
ATHENES	15	0608 E	0618		N08	W32			1-	3		.60	.70			
ISTANBUL	15	0834 E	0839		N03	W23	6487	5 D	1							
ATHENES	15	0837	0842		N13	W27			1-	3		.50	.50			
HTE-PROVEN	15	1018	1024		N11	W35			1-							
	16	0200	0550	NO FLARE	PATROL											
ATHENES	16	0725	0742		S13	E12			1-	2		1.70	1.80			
MCMATH	16	1928	1937	1930	S12	W42	6482		1-	2	1930	.20	.30			
	17	0145	0345	NO FLARE	PATROL											
	17	0420	0500	NO FLARE	PATROL											
	17	1110	1125	NO FLARE	PATROL											
	17	2000	2015	NO FLARE	PATROL											
HONOLULU	17	2146	2150 D	2146	N11	E28			1-	2	2146	.31	.32			
	18	0145	0240	NO FLARE	PATROL											
	18	0310	0335	NO FLARE	PATROL											
	18	0345	0525	NO FLARE	PATROL											
ATHENES	18	0601	0614		S06	W72			1-	2		.50	1.80			

SOLAR FLARES

JULY 1962

OBSERVATORY	DATE JULY 1962	OBSERVED UNIVERSAL TIME START	END	MAX. PHASE	LOCATION APPROX. LAT.	MER. DIST.	McMATH PLAGE REGION	DURATION — MINUTES	IMPORTANCE	OBS. COND.	MEASUREMENTS TIME — U T	MEAS. AREA Sq. Deg.	CORR. AREA Sq. Deg.	MAX. WIDTH Ha	MAX INT °₀	PROVISIONAL IONOSPHERIC EFFECT
CAPRI S	18	0728 E	0752 D		N09	W71			1-	2	0733	.40	1.50			
	18	1050	1055	NO FLARE	PATROL											
ATHENES	18	1132 E	1138		S10	E28			1-	3		.50	.60			
HTE-PROVEN	18	1735	1742		N05	E50			1-							
LOCKHEED	18	1839	1849	1844	N04	E46			1-	2	1844	.30	.30		10	
	18	2055	2100	NO FLARE	PATROL											
	18	2150	2155	NO FLARE	PATROL											
	18	2300	2305	NO FLARE	PATROL											
	18	2345	2400	NO FLARE	PATROL											
	19	0000	0225	NO FLARE	PATROL											
	19	0315	0320	NO FLARE	PATROL											
	19	0435	0500	NO FLARE	PATROL											
MCMATH	19	1249	1255	1251	N05	E32	6494		1-	3	1251	.20	.20			
	19	2115	2145	NO FLARE	PATROL											
	19	2225	2230	NO FLARE	PATROL											
	19	2350	2400	NO FLARE	PATROL											
	20	0000	0030	NO FLARE	PATROL											
	20	0135	0140	NO FLARE	PATROL											
	20	0145	0220	NO FLARE	PATROL											
	20	0410	0430	NO FLARE	PATROL											
CAPRI S	20	0658 E	0717 D		N15	W05			1-	3	0702	1.40	1.50			
CAPRI S	20	0935 E	0951 D		N03	E25			1-	3	0939	1.10	1.20			
WENDEL	20	0945 E	0959 D		N06	E27			1-							
WENDEL	20	1202	1240 D		N05	E24	6494	38 D	1+				5.00			
LOCARNO	20	1203	1215	1207	N06	E20	6494	12	1	2	1207		1.00			
HTE-PROVEN	20	1203	1225	1205	N05	E25			1-		1205	1.20	1.30			
CAPRI S	20	1205 E	1244		N06	E23	6494	39 D	1	3	1211	1.90	2.10			
	20	1815	1820	NO FLARE	PATROL											
	20	1905	1910	NO FLARE	PATROL											
	20	2205	2210	NO FLARE	PATROL											
HONOLULU	21	0020 E	0110	0040	N10	W16			1-	2	0040	.82	.83			
	21	0145	0245	NO FLARE	PATROL											
	21	0250	0300	NO FLARE	PATROL											
	21	0305	0315	NO FLARE	PATROL											
	21	0320	0420	NO FLARE	PATROL											
	21	0425	0445	NO FLARE	PATROL											
ATHENES	21	0659 E	0703		N01	E80			1-	3		.20	1.60			
WENDEL	21	0659 E	0743 D		N06	E78	6497	44 D	1+				7.00			
CAPRI S	21	0902	0940 D		N05	E75	6497	38 D	1	3	0915	1.00	3.70			
WENDEL	21	0902	1010 D	0916	N07	E75	6497	68 D	2				10.00			
ONDREJOV	21	0912 E	0937 D		S02	E78			1-	3	0914			1.60		
WENDEL	21	1451 E	1509 D		S07	W08			1-							
	21	2235	2400	NO FLARE	PATROL											
LOCKHEED	21	2323	2357	2331	N07	E62	6497	34	2	1	2331	4.00	6.00		10	
	22	0000	0320	NO FLARE	PATROL											
	22	0330	0345	NO FLARE	PATROL											
	22	0355	0435	NO FLARE	PATROL											

SOLAR FLARES

JULY 1962

OBSERVATORY	DATE JULY 1962	OBSERVED UNIVERSAL TIME START	END	MAX. PHASE	LOCATION APPROX. LAT.	MER DIST	McMATH PLAGE REGION	DURATION — MINUTES	IMPORTANCE	OBS COND.	MEASUREMENTS TIME — U.T.	MEAS AREA Sq. Deg	CORR. AREA Sq. Deg	MAX WIDTH Ha	MAX INT -	PROVISIONAL IONOSPHERIC EFFECT
ONDREJOV	22	0503 E	0517 D		S01	E60	6497	14 D	1	3	0505			1.70		
ATHENES	22	0627 E	0635 D		N05	E63			1-	4		.90	1.10			
ATHENES	22	0711	0713		S02	E68			1-	4		.30	.80			
	22	1835	1845	NO FLARE	PATROL											
	22	2325	2400	NO FLARE	PATROL											
	24	0000	0450	NO FLARE	PATROL											
HTE-PROVEN	24	0943	0950		N00	E42			1-							
MCMATH	24	1154	1159	1155	N12	E77	6500		1-	3	1155	.20	.60			
	24	1845	1900	NO FLARE	PATROL											
	24	2050	2105	NO FLARE	PATROL											
	24	2135	2400	NO FLARE	PATROL											
	25	0000	0020	NO FLARE	PATROL											
	25	0130	0150	NO FLARE	PATROL											
HTE-PROVEN	25	0827	0833		N05	W40			1-							
WENDEL	25	0828 E	0850 D		N05	W58	6495	22 D	1				4.00			
CAPRI S	25	0829 E	0855 D		N03	W42			1-	3	0837	.80	1.10			
ATHENES	25	0831 E	0847		N01	W41			1-	2		.70	.90			
	25	2315	2320	NO FLARE	PATROL											
	25	2325	2335	NO FLARE	PATROL											
	25	2345	2400	NO FLARE	PATROL											
	26	0145	0430	NO FLARE	PATROL											
ATHENES	26	0827 E	0833		N08	W60			1-	2		.40	.70			
HTE-PROVEN	26	1150	1210		S02	E15			1-							
MCMATH	26	1153	1230 D	1157	S04	E14	6499		1-	3	1157	.60	.60			
WENDEL	26	1158 E	1219 D		S04	E14	6499	21 D	1				3.00			
	26	2240	2400	NO FLARE	PATROL											
	27	0000	0230	NO FLARE	PATROL											
	27	0250	0350	NO FLARE	PATROL											
	27	0405	0425	NO FLARE	PATROL											
	27	2040	2050	NO FLARE	PATROL											
	27	2105	2110	NO FLARE	PATROL											
	27	2115	2130	NO FLARE	PATROL											
	27	2150	2220	NO FLARE	PATROL											
	27	2300		NO FLARE	PATROL											
	27	2400		NO FLARE	PATROL											
	28	0000	0450	NO FLARE	PATROL											
CAPRI S	28	0641 E	0700 D		N01	W75			1-	3	0648	.40	1.60			
	28	1805	1840	NO FLARE	PATROL											
	29	0200	0220	NO FLARE	PATROL											
	29	0240	0245	NO FLARE	PATROL											
	29	0250	0510	NO FLARE	PATROL											
	29	1715	1730	NO FLARE	PATROL											
	29	1735	1900	NO FLARE	PATROL											
LOCKHEED	29	1813	2030	1835	N01	W30	6497	137	1	2	1835	3.20	3.20		10	
SAC PEAK	29	1901 E	1930 U	1902 E	S11	W31	6499	29 D	2	1		6.15	6.39		17	

SOLAR FLARES

JULY 1962

OBSERVATORY	DATE JULY 1962	OBSERVED UNIVERSAL TIME START	OBSERVED UNIVERSAL TIME END	OBSERVED UNIVERSAL TIME MAX. PHASE	LOCATION APPROX. LAT.	LOCATION APPROX. MER. DIST.	LOCATION McMATH PLAGE REGION	DURATION — MINUTES	IMPORTANCE	OBS. COND.	MEASUREMENTS TIME — U T	MEASUREMENTS MEAS. AREA Sq. Deg.	MEASUREMENTS CORR. AREA Sq. Deg.	MEASUREMENTS MAX. WIDTH Ha	MEASUREMENTS MAX. INT. °	PROVISIONAL IONOSPHERIC EFFECT
	29	1950	2010	NO FLARE	PATROL											
	29	2215	2230	NO FLARE	PATROL											
	29	2250	2315	NO FLARE	PATROL											
	30	0055	0140	NO FLARE	PATROL											
	30	0200	0600	NO FLARE	PATROL											
ATHENES	30	0745 E	0752		N44	E70			1-	2		.30	1.10			
	30	1650	1655	NO FLARE	PATROL											
LOCKHEED	30	1716	1732	1723	N29	E64			1-	2	1723	.20	.30		10	
SAC PEAK	30	1718	1727	1721	N18	E67			1-	2		.21	.35		15	
SAC PEAK	30	2109	2121 D	2113	N18	E65			1-	2		.25	.39		15	
	30	2300	2400	NO FLARE	PATROL											
	31	0000	0040	NO FLARE	PATROL											
	31	2300	2310	NO FLARE	PATROL											
	31	2345	2355	NO FLARE	PATROL											

COMMERCE - STANDARDS - BOULDER

ATHENES	ATHENS, GREECE
BAKOU	PIRCULI, USSR
CAPETOWN	ROYAL OBSERVATORY, CAPE OF GOOD HOPE
CAPRI F	CAPRI, ITALY (GERMAN)
CAPRI S	CAPRI, ITALY (SWEDISH)
CRIMÉE	SIMEIZ, USSR
HERSTMONCEU	ROYAL GREENWICH OBSERVATORY, HERSTMONCEUX, ENGLAND
HONOLULU	HAWAII, USA
IKOMASAN	KYOTO, JAPAN
KIEV KO	KIEV GAO, USSR
KIEV KY	KIEV UNIVERSITY, USSR
LOCKHEED	LOS ANGELES, CALIF., USA
MCMATH	MCMATH-HULBERT PONTIAC, MICH., USA
MOSCOU	MOSCOW-GAISH, USSR
NERA	NEDERHORST den BERGH, NETHERLANDS
NIZMIR	KRASNAYA PAKHRA, USSR
SAC PEAK	SACRAMENTO PEAK, N.MEX. USA
SALTSJÖBADEN	STOCKHOLM, SWEDEN
SCHAUINS	SCHAUINSLAND, GFR
TACHKENT	TASHKENT, USSR
WENDEL	WENDELSTEIN, GFR

HTE-PROVEN = HAUTE-PROVENCE

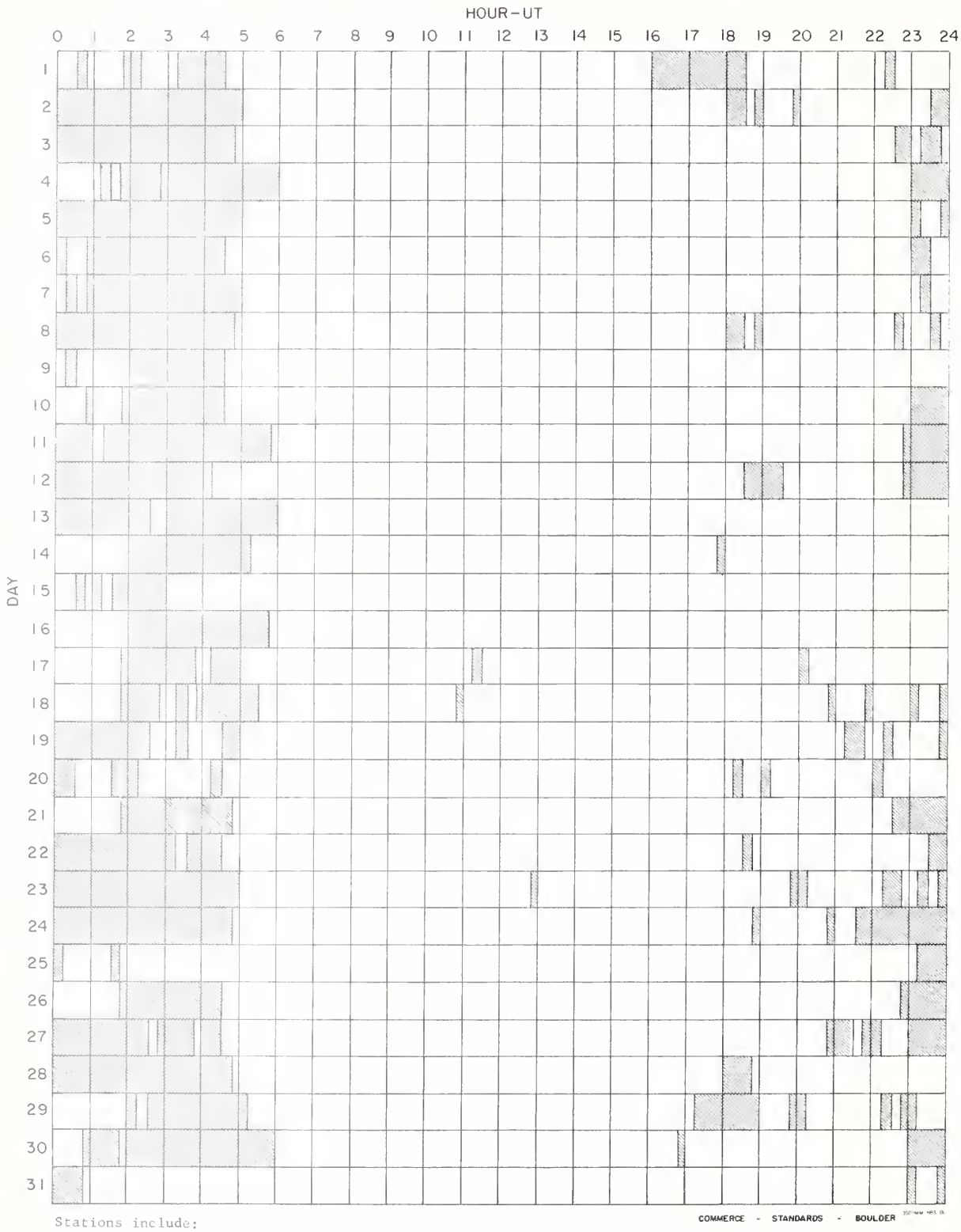
ALL VALUES IN THE MAXIMUM INTENSITY COLUMN FOR SAC PEAK ARE ARBITRARY UNITS (0-40) AND FOR LOCKHEED ARE ARBITRARY UNITS (10-40), NOT PERCENT OF CONTINUOUS SPECTRUM.

SEE DESCRIPTIVE TEXT PUBLISHED NOVEMBER 1961 FOR DEFINITION OF CORRECTED AREA VALUES LISTED FOR CLIMAX, HAWAII, LOCKHEED AND SACRAMENTO PEAK.

E = LESS THAN D = GREATER THAN U = APPROXIMATE □ = NOT REPORTED.

INTERVALS OF NO FLARE PATROL OBSERVATIONS

JULY 1962



Stations include:

Arcetri	Herstmonceux	Istanbul	Meudon	Wendelstein
Athenes	Honolulu	Kodaikanal	Ondrejov	
Haute-Provence	Huancayo	McMath-Hulbert	Sacramento Peak	

SOLAR FLARES

APRIL 1962

OBSERVATORY	DATE APR 1962	OBSERVED UNIVERSAL TIME START	END	MAX. PHASE	LOCATION APPROX. LAT.	MER. DIST.	McMATH PLAGE REGION	DURATION — MINUTES	IMPORTANCE	OBS. COND.	MEASUREMENTS TIME — U T	MEAS. AREA Sq. Deg.	CORR. AREA Sq. Deg.	MAX WIDTH Hα	MAX. INT. %	PROVISIONAL IONOSPHERIC EFFECT
CAPETOWN	01	1058	1105	1059	N09	W90			1-		1059	.20				
CAPRI -F	01	1341 E	1352	1341 U	N08	W90	6373	11 D	1	2		.50				
CLIMAX	01	1732	1744	1738	S08	E20			1-			.90	.90			S-SWF
CLIMAX	01	1916	1925	1920	S08	E20			1-			.90	.90			
	02	0115	0150	NO FLARE	PATROL											
	03	0205	0235	NO FLARE	PATROL											
	03	0355	0425	NO FLARE	PATROL											
	03	0435	0440	NO FLARE	PATROL											
	03	0515	0525	NO FLARE	PATROL											
CAPRI -F	03	1005 E	1013	1006	N06	W41			1-	1	1006	.50	1.00			
UCCLE	03	1053 E	1057	1055	N15	W45			1-	4	1055					
TACHKENT	04	0456	0503	0358	N07	W47			1-	2	0459	.19	.30	1.50	85	
	04	0605	0635	NO FLARE	PATROL											
BUCHAREST	04	0755 E	0859 D	0831	N07	W14			1-	3			.60			
	04	1420	1430	NO FLARE	PATROL											
	04	1650	1730	NO FLARE	PATROL											
	04	2125	2130	NO FLARE	PATROL											
HTE-PROVEN	05	1338	1352 D		S08	W37			1-							
	05	1350	1400	NO FLARE	PATROL											
	05	2125	2130	NO FLARE	PATROL											
NIZMIR	06	0722	0748 D	0729	N03	W58	6382	26 D	1			.52		.80		
CAPRI -F	06	0723 E	0730	0723	N05	W55			1-	2	0723	1.00	1.60			
CAPETOWN	06	0854	0925	0903	S06	W43			1-		0903	1.10	1.50			
HTE-PROVEN	06	0855	0920		S08	W47			1-							
NIZMIR	06	0858 E	0926 D	0900	S09	W46	6379	28 D	1			.93		.55		
CAPRI -F	06	0907	0917	0909	S07	W41			1-	2	0908	1.50	2.00			
CAPRI -F	06	1539 E	1542 D	1541	N10	W26			1-	1	1540	1.50	1.70			
	07	0140	0200	NO FLARE	PATROL											
CAPRI -F	07	0842	0902	0855	N11	W34			1-	2	0857	.50	1.00			
	08	0005	0010	NO FLARE	PATROL											
	08	0605	0610	NO FLARE	PATROL											
CAPRI -F	08	1003	1020	1005	N10	W48			1-	2	1005	.50	1.00			
	09	0235	0240	NO FLARE	PATROL											
	09	0255	0300	NO FLARE	PATROL											
TACHKENT	09	0502	0539	0507	N10	W67			1-	2	0507	1.37	3.60	1.60	85	
UCCLE	09	0847 E	0951		N12	W70	6385	64 D	1	4		2.00	4.00			
CAPRI -F	09	0907	0936 D	0920	N10	W66	6385	29 D	1	2	0918	1.00	2.00			
BUCHAREST	09	0929 E	1145 D		N10	W67			1-	3						
UCCLE	09	0957	1046 D	1007	N12	W70			1-	3						
UCCLE	09	1059 E	1104 D		N12	W70			1-	3						
UCCLE	09	1114	1119		N12	W70			1-	3						
UCCLE	09	1339	1411 D		N10	W70			1-	3						
CAPRI -F	10	1333 E	1339	1333	N08	W90			1-	2	1334	.50	1.00			

SOLAR FLARES

APRIL 1962

OBSERVATORY	DATE APR 1962	OBSERVED UNIVERSAL TIME START	END	MAX. PHASE	LOCATION APPROX. LAT.	MER. DIST	McMATH PLAGE REGION	DURATION — MINUTES	IMPORTANCE	OBS. COND.	MEASUREMENTS TIME — U T	MEAS. AREA Sq. Deg.	CORR. AREA Sq. Deg.	MAX WIDTH Hα	MAX. INT. %	PROVISIONAL IONOSPHERIC EFFECT
IKOMASAN	10	2327	0005		N11	W90	6385	38	1		2340			3.61	95	
	11	0225	0235	NO FLARE	PATROL											
NIZMIR	11	0835 E	0840	0835	N08	W90	6385	5 D	1+			.93		.60		
CAPRI -F	11	1631	1638	1631	N10	W85	6385	7	1	2	1631	.50	2.00			
CLIMAX	11	2137	2327 D		N08	E90	6393	110 D	1		2146	.90	4.50			
BAKOU	12	0721 E	0825	0741	N10	E29	6386	64 D	1	3	0741	2.73	3.40		56	
NIZMIR	12	0736 E		0736	N08	E90	6393	D	1			1.03		.50		
CAPRI -F	12	0855 E	0907 D		N10	E25	6386	12 D	1	1	0855	.50	.70			
HTE-PROVEN	12	1121	1145		N10	E24			1-							
CAPETOWN	12	1128	1200	1132	N11	E25			1-		1132	1.20	1.40			
UCCLE	12	1141 E	1159		S09	E75			1-	3						
UCCLE	12	1141 E	1159	1146	N10	E26			1-	3						
CLIMAX	12	1427	1439	1433	N07	E90	6393	12	1			.60	3.00			
CLIMAX	12	2150	2248	2219	N10	E18			1-			1.50	1.50			
CLIMAX	12	2355	2400 D		N08	E89			1-		2358	.20	.50			
	13	0145	0155	NO FLARE	PATROL											
	13	0310	0330	NO FLARE	PATROL											
	13	0340	0350	NO FLARE	PATROL											
	13	0415	0420	NO FLARE	PATROL											
	13	0425	0430	NO FLARE	PATROL											
ABASTUMANI	13	0730	0738	0734	N12	E14			1-	3		1.80	1.97		58	
CAPRI -F	13	0847 E	0906 D	0850	N08	E73	6393	19 D	1+	1	0850	2.90	9.50			
ABASTUMANI	13	0848	0948	0850	N10	E79	6393	60	1+	3		4.53	9.22		76	S-SWF
BAKOU	13	0850	0925	0855	N07	E75	6393	35	1+	2	0855	1.83	9.34		72	
UCCLE	13	1037	1043		N06	E85			1-	2						
UCCLE	13	1037	1055 D		N07	E16			1-	2						
UCCLE	13	1042	1055 D		S12	E60			1-	2						
UCCLE	13	1105	1112	1109	N06	E80			1-	3						
UCCLE	13	1130 E			N08	E78			1-	3						
UCCLE	13	1316 E	1329		N06	E80			1-	3						
UCCLE	13	1412	1424		N06	E78			1-	3						
UCCLE	13	1434	1436		N07	E13			1-	3						
UCCLE	13	1514	1529	1516	N07	E78			1-	3						
CAPRI -F	13	1711 E	1725		N10	E14	6386	14 D	1	1						
CLIMAX	13	2118	2147	2121	N12	E10			1-			.30	.30			
CLIMAX	13	2254	2311	2257	N10	E04			1-			1.30	1.30			
CLIMAX	13	2302	2340	2311	N14	E52			1-			.70	.90			
VOROSHILOV	14	0002	0008	0006	S07	E46			1-	2		.18			69	
VOROSHILOV	14	0006	0011	0007	N12	E02			1-	2		.45			87	
	14	0150	0200	NO FLARE	PATROL											
VOROSHILOV	14	0315	0327	0318	N11	E02	6386	12	1+	2		2.25			103	
	14	0405	0425	NO FLARE	PATROL											
HTE-PROVEN	14	0820	0845		S07	E40			1-							
UCCLE	14	0911 E	0917		N10	E00			1-	4						
HTE-PROVEN	14	0914	0920		S07	E40			1-							
CAPRI -F	14	0920 E	0930	0920	S07	E38	6391	10	1	2	0920	2.50	3.20			
NIZMIR	14	0924 E	0927 D	0924	S08	E42	6391	3 D	1+			1.80		.70		

SOLAR FLARES

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OBSERVATORY	DATE APR 1962	OBSERVED UNIVERSAL TIME START	END	MAX. PHASE	LOCATION APPROX. LAT.	MER. DIST.	McMATH PLAGE REGION	DURATION — MINUTES	IMPORTANCE	OBS. COND.	MEASUREMENTS TIME — U T	MEAS. AREA Sq. Deg.	CORR. AREA Sq. Deg.	MAX. WIDTH Ha	MAX. INT. %	PROVISIONAL IONOSPHERIC EFFECT
UCCLE	14	0924	0940		S10	E42			1-	3						
CAPRI -F	14	1002	1010	1002	N10	W02			1-	2	1002	.50	1.00			
UCCLE	14	1014 E	1022 D		N06	E68			1-	3						
HTE-PROVEN	14	1022	1030		S07	E40			1-							
CAPRI -F	14	1027	1039	1030	S07	E38	6391	12	1	2	1030	2.00	2.60			
HTE-PROVEN	14	1250	1308		N09	W03			1-							
CLIMAX	14	1934	2026	1948	N09	E90	6395	52	2			1.80	9.00			S-SWF
VOROSHILOV	15	0335	0344	0337	N10	E55	6393	9	1+	2		1.53			97	
ALMA-ATA	15	0336 E	0344	0337	N10	E56	6393	8 D	1		0337	1.24			55	
MITAKA	15	0337	0342	0338	N09	E53	6393	5	1	1	0339	1.60	2.85	2.06	115	
TACHKENT	15	0338	0343	0339	N09	E51	6393	5	1	2	0339	4.56	7.80	2.30	65	
TACHKENT	15	0530	0550	0533	N07	E53	6393	20	1+	2	0536	2.09	3.50	2.70	115	G-SWF
ALMA-ATA	15	0535 E	0544	0537	N07	E52	6393	9 D	1		0537	1.86			55	
HTE-PROVEN	15	0558	0615		N10	W12			1-							
HTE-PROVEN	15	0619	0638		N07	E50			1-							
CAPRI -F	15	1525	1035 D	1526	N10	W17			1-	2	1526	.50	1.00			
CAPRI -F	15	1614	1622 D	1615	N10	W17			1-	2	1615	.50	1.00			
CLIMAX	15	1716	1726	1720	N08	W19			1-			.40	.40			S-SWF
CLIMAX	15	1928	1938	1931	N08	W19			1-			.30	.30			
CLIMAX	15	1943	2007	1947	N08	W19			1-			1.50	1.50			
CLIMAX	15	2153	2159	2154	N08	W19			1-			.40	.40			
CLIMAX	15	2240	2301	2244	N08	W19			1-			1.60	1.60			
VOROSHILOV	15	2242	2302	2243	N10	W24	6386	20	1+	1		1.53			144	
IKOMASAN	16	0003	0030 D	0013	N11	W25	6386	27 D	1		0013	1.34		1.02	100	
CLIMAX	16	0004	0014	0008	N10	W25			1-			.30	.30			
ALMA-ATA	16	0233	0249	0236	N11	W24			1-		0236	.93			65	
ALMA-ATA	16	0307	0317	0311	N13	W26			1-		0311	.93			73	
ALMA-ATA	16	0346	0353	0348	N13	W26			1-		0348	1.50			66	
ALMA-ATA	16	0442	0512	0450	N12	W25	6386	30	1		0450	3.71			68	
NIZAMIAH	16	0450	0524	0502	N11	E39	6393	34	1	2	0502	2.43	3.30	1.60		
ALMA-ATA	16	0451	0516	0458	N12	E38			1-		0458	.93			70	
CAPRI -F	16	0833	0841	0834	N10	E38			1-	2	0834	.50	.65			
KHARKOV	16	0859	0927 D		N05	E65	6395	28 D	1	2	0910	1.14	1.40	2.00		
CAPETOWN	16	0903	0923	0907	N07	E62	6395	20	1		0907	1.00	2.10			
CAPRI -F	16	0907	0924 D	0911	N06	E63	6395	17 D	1	2	0911	1.70	3.40			
CAPETOWN	16	1002	1014	1005 U	N10	W27			1-		1005	.90	1.00			
CAPRI -F	16	1305	1332	1314	N11	W26	6386	27	1+	3	1314	2.00	2.30			
CLIMAX	16	1311	1333 D	1319	N10	W27			1-			.40	.40			
	16	2305		NO FLARE	PATROL											
	16	2320		NO FLARE	PATROL											
MITAKA	17	0524 E	0540		N09	W35	6386	16 D	1	1	0524	.80	.97	1.75	107	
BUCHAREST	17	0835 E	0856 D		N08	E22			1-	1			1.20			
CAPRI -F	17	1312 E	1327	1315	N11	E19	6393	15 D	1	2	1314	2.90	3.10			
CAPRI -F	17	1421	1429	1423	N09	E19			1-	2	1422	.50	.50			
CLIMAX	17	1444	1459	1447	N11	W41			1-			.30	.40			
CAPRI -F	17	1454 E	1507 D	1454	N11	W41	6386	13 D	1	1	1454	2.00	2.70			
	18	0130	0145	NO FLARE	PATROL											

SOLAR FLARES

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OBSERVATORY	DATE APR 1962	OBSERVED UNIVERSAL TIME START	OBSERVED UNIVERSAL TIME END	OBSERVED UNIVERSAL TIME MAX. PHASE	LOCATION APPROX. LAT.	LOCATION APPROX. MER DIST	LOCATION McMATH PLAGE REGION	DURATION — MINUTES	IMPORTANCE	OBS. COND.	MEASUREMENTS TIME — U T	MEASUREMENTS MEAS. AREA Sq. Deg	MEASUREMENTS CORR. AREA Sq. Deg.	MEASUREMENTS MAX. WIDTH Hα	MEASUREMENTS MAX INT. %	PROVISIONAL IONOSPHERIC EFFECT
ABASTUMANI	18	0538	0618 D	0546	N10	E12	6393	40 D	1+	3		5.85	6.30		65	
CRIMEE	18	0540	0630	0547	N09	E12	6393	50	1	2	0547	4.50				
NIZAMIAH	18	0548 E	0554 D		N11	E15	6393	6 D	1	1	0548	3.64	3.93	1.50		
BUCHAREST	18	0733 E	0745 D		N09	E10			1-	2			.30			
BUCHAREST	18	0825 E	0905 D		N10	W52			1-	2			1.80			
BUCHAREST	18	0846 E	0856 D		N09	E10			1-	2			1.20			
BUCHAREST	18	0905 E	0930 D	0915	N09	E11			1-	2			1.10			
CLIMAX	18	1739	2019	1807	N06	E04	6393	160	3		1851	12.40	12.40			G-SWF
CLIMAX	18	1739	2019	1851	N06	E04			3							
ABASTUMANI	19	0715 E	0925 D	0921 U	N10	W09			1-	2		1.44	1.50		62	
BUCHAREST	19	0718 E	0730 D	0722	N09	W07			1-	2			1.70			
CAPRI -F	19	0741	0809	0750	N11	W03			1-	2	0742	.50	.50			
BUCHAREST	19	0742 E	0800 D		N11	W02			1-	2			.50			
BUCHAREST	19	0849 E	0855 D		N10	E35			1-	2			.70			
UCCLE	19	0851 E	0901		N10	W06			1-	3						
UCCLE	19	0851 E	0906		N10	E36			1-	3						
UCCLE	19	0902	0939	0909	N10	W08			1-	3						
KHARKOV	19	0904	0927		N09	W08	6393	23	1	3	0906	1.14	1.30	1.70		
BAKOU	19	0904	0935	0910	N10	W10	6393	31	1	3	0910	2.28	2.46		66	
CAPETOWN	19	0905	0931 D	0908	N10	W08			1-		0908	1.10	1.10			
BUCHAREST	19	0906 E	0933 D		N09	W08	6393	27 D	1	2			2.20			
HTE-PROVEN	19	0907	0935		N06	W12			1-							
CAPRI -F	19	0912	0928	0918	N09	W10	6393	16	1	3	0915	2.50	2.50			
UCCLE	19	0914	0919		N10	E35			1-	3						
BUCHAREST	19	0914 E	0920 D		N10	E35			1-	2			1.30			
CRIMEE	19	0916 E	0920		N09	E35			1-	1	0916	.90				
CRIMEE	19	0916 E	0942		N10	W09	6393	26 D	1	1	0916	1.80				
NIZAMIAH	19	0920 E	0948	0923	N10	W10	6393	28 D	1	2	0923	3.04	3.20	1.60		
BAKOU	19	0928	1005 D	0933	N06	E21	6395	37 D	1+	3	0933	3.65	4.09		75	
KHARKOV	19	0930	0952		N04	E22	6395	22	1	3	0932	1.14	1.30	1.50		
CRIMEE	19	0931	0945	0933	N06	E22	6395	14	1	1	0933	2.70				
UCCLE	19	0931	1004	0936	N05	E23			1-	3						
BUCHAREST	19	0932 E	1006 D		N06	E23	6395	34 D	1	2			2.40			
HTE-PROVEN	19	0934	0955		N08	E20			1-							
CAPETOWN	19	0937 E	1006		N07	E22			1-		0937	1.40	1.60			
CAPRI -F	19	0941	0956	0944	N07	E22	6395	15	1	2	0944	1.90	2.10			
UCCLE	19	1036	1046	1039	S14	E40			1-	3						
BUCHAREST	19	1039 E	1044 D		N14	E31			1-	2			1.40			
UCCLE	19	1125	1134	1128	N07	W07			1-	3						
UCCLE	19	1150	1155		N11	W05			1-	3						
UCCLE	19	1234	1304		N11	W05			1-	3						
UCCLE	19	1326	1434	1331	N08	E20	6395	68	1	3	1331	2.00	2.60			
UCCLE	19	1409 E	1444 D		N06	E04			1-	3						
UCCLE	19	1524 E	1616 D		N10	E04			1-	3						
UCCLE	19	1544	1621	1552	N06	E04			1-	3						
CAPRI -F	19	1555 E	1606	1555	N09	W07	6393	11 D	1	1	1555	2.00	2.00			
CLIMAX	19	1737	1803	1744	N05	W13			1-			.10	.10			
CLIMAX	19	1935	2000	1938	N05	W08	6393	25	1			3.60	3.60			S-SWF
CLIMAX	19	2037	2049	2040	N08	W02			1-			.90	.90			
IKOMASAN	19	2345 E	0005 D		N09	E12	6395	20 D	1+		2349	3.61		.94	100	

SOLAR FLARES

APRIL 1962

OBSERVATORY	DATE APR 1962	OBSERVED UNIVERSAL TIME START	END	MAX. PHASE	LOCATION APPROX. LAT.	MER. DIST.	McMATH PLAGE REGION	DURATION — MINUTES	IMPORTANCE	OBS. COND.	MEASUREMENTS TIME — U T	MEAS. AREA Sq. Deg.	CORR. AREA Sq. Deg.	MAX WIDTH Ha	MAX INT. %	PROVISIONAL IONOSPHERIC EFFECT
VOROSHILOV	20	0238	0246 D	0238	N12	W18			1-	2		1.34			71	
VOROSHILOV	20	0316	0339	0319	N10	W16	6393	23	1+	2		2.25			80	
MITAKA	20	0317	0329	0322	N09	W12	6393	12	1	1	0320	1.51	1.59	2.18	115	
CRIMEE	20	0337 E	0610		N09	W16	6393	153 D	2	1	0337	10.81				
CRIMEE	20	0454 E	0522		N08	W20	6393	28 D	1	1	0454	3.15				
BUCHAREST	20	0722 E	0852 D		N10	W15	6393	90 D	1	2			2.40			
CAPRI -F	20	0724	0740	0732	N11	W14	6393	16	1	3	0732	2.10	2.10			
CAPRI -F	20	0914	0927 D	0917	N08	W15			1-	2	0916	.70	.70			
CAPRI -F	20	1022	1048	1018	N09	W18	6393	26	1+	2	1035	3.20	3.40			
CAPRI -F	20	1022	1048	1036	N09	W18			1+							
UCCLE	20	1025 E	1036 D		N10	W22			1-	2						
ISTANBUL	20	1025	1036		N11	W17	6393	11	1							
ISTANBUL	20	1033	1042		N07	W17	6393	9	1+							
UCCLE	20	1034 E	1044		N07	W18			1-	2						
UCCLE	20	1104 E	1109 D		N13	W10			1-	2						
UCCLE	20	1104 E	1111 D		N10	W20			1-	2						
UCCLE	20	1121	1131 D		N06	W20			1-	2						
CAPRI -F	20	1124	1139 D	1126	N07	W19			1-	2	1125	.50	.50			
UCCLE	20	1201	1231 D		N06	W25			1-	2						
UCCLE	20	1234 E	1309 D		N06	W20			1-	2						
UCCLE	20	1234 E	1309 D	1239	N06	W25			1-	2						
UCCLE	20	1319 E	1454	1326	N06	W20	6393	95 D	1	2	1326	3.00	4.00			
CAPRI -F	20	1320	1355 D	1330	N08	W20	6393	35 D	2-	2	1330	4.50	5.40			
KIEV KO	20	1325 E	1331 D	1331	N07	W19	6393	6 D	1+	1	1331	2.58			66	
UCCLE	20	1536 E	1547		N10	W25			1-	2						
UCCLE	20	1601	1639 D		N12	W25			1-	2						
UCCLE	20	1625	1629 D		S12	E22			1-	2						
CLIMAX	20	2010 E	2040		N09	W27			1-		2016	1.20	1.20			S-SWF
ALMA-ATA	21	0202	0240	0204	N09	W26	6393	38	1+		0204	4.28			96	S-SWF
VOROSHILOV	21	0203	0230	0205	N11	W28	6393	27	1+	2		2.33			115	
ALMA-ATA	21	0426	0437	0427	N17	W36			1-		0427	1.13			66	
CRIMEE	21	0501	0540		N10	W35	6393	39	1	1	0503	1.34				
ALMA-ATA	21	0503	0518	0507	N10	W34			1-		0507	.98			68	
BUCHAREST	21	0715 E	0750 D		N07	W32	6393	35 D	1	2			3.30			
BUCHAREST	21	0715 E	0900 D	0748	N09	W29	6393	105 D	1	2			2.60			
BUCHAREST	21	0726 E	0900 D	0806	N11	W35			1-	2			.70			
BUCHAREST	21	0750 E	0838 D	0806	N15	W39			1	2			2.30			
CRIMEE	21	0917	0928	0920	N09	W35			1-	1	0920	1.34				
CRIMEE	21	1104	1121		N09	W31			1-		1106	1.34				
CRIMEE	21	1140	1210		N09	W32			1-	1	1143	1.79				
CLIMAX	21	1450	1456	1452	N08	W32			1-			.60	.70			
CLIMAX	21	1919	1923 D		N03	W45			1-		1921	.40	.50			
MITAKA	22	0225	0237 D	0229	N05	W46	6393	12 D	1	1	0225	2.01	3.02	1.75	120	
ALMA-ATA	22	0226	0243	0232	N08	W46			1-		0232	1.13			70	
BUCHAREST	22	0803 E	0815 D		N08	W51	6393	12 D	1-	2			1.70			
UCCLE	22	1018 E	1029		N10	W52			1-	2						
CRIMEE	22	1445 E	1550		N08	W51	6393	65 D	2	1	1445	10.31				S-SWF
CLIMAX	22	1458 E	1524 D		N08	W45	6393	26 D	1		1506	2.80	3.40			
IKOMASAN	23	0438 E	0502 D		N12	W55	6393	24 D	1		0438	.83		1.22	110	

SOLAR FLARES

APRIL 1962

OBSERVATORY	DATE APR 1962	OBSERVED UNIVERSAL TIME START	END	MAX PHASE	LOCATION APPROX. LAT.	MER. DIST.	McMATH PLAGE REGION	DURATION — MINUTES	IMPORTANCE	OBS. COND.	MEASUREMENTS TIME U T	MEAS AREA Sq. Deg.	CORR. AREA Sq Deg	MAX WIDTH Hα	MAX INT.	PROVISIONAL IONOSPHERIC EFFECT
CAPRI -F	23	1117	1137	1120	N13	W68	6393	20	1	2		.90	2.10			
CAPRI -F	23	1209 E	1214 D	1209	N06	W52	6393		1-	2	1209	.50	.80			
CLIMAX	23	1946	2006	1948	N10	W90	6393	20	1			1.00	5.00			
CAPRI -F	24	0725 E	0744	0728	N10	W80	6393	19 D	1	2						
SCHAUINS	24	0730 E	0745 D		N08	E77	6403	15 D	2	2						
HTE-PROVEN	24	0735 E	0755		N15	W90			1-							
BUCHAREST	24	0758 E	0810 D	0800	N07	W90			1-	2						
UCCLE	24	0827 E	0907 D		S12	W30			1-	2						
UCCLE	24	0835	0907 D		N10	W87			1-	2						
UCCLE	24	0957 E	1005 D		N10	W85			1-	2						
MITAKA	25	0058 E	0115	0105	N08	W88	6393	17 D	1	1	0058	1.31		5.51	125	
CLIMAX	25	0104	0117	0112	N05	W83			1-			.40	1.10			
VOROSHILOV	25	0105 E	0112		N07	W90			1-	2		.80			87	
CAPETOWN	25	0724	0740	0727	N08	W88	6393	16	1		0727	.40				
HTE-PROVEN	25	0830	0837		N10	E70			1-							
CAPETOWN	25	0833	0843	0835	N08	E84	6403	10	1		0835	.70				
CAPRI -F	25	0834 E	0850 D	0836	N07	E78			1-	2	0838	1.00	2.70			
CAPETOWN	25	0915	0940	0916	N08	W88			1-		0916	.20				
CAPETOWN	25	1050	1157	1108	N10	W90	6393	67	1		1108	.60				
UCCLE	25	1117 E	1128		N10	E80			1-	3						
UCCLE	25	1214 E	1255		N13	E78			1-	3						
CAPETOWN	25	1218	1239	1222	N08	W90			1-		1222	.10				
	25	2300	2340	NO FLARE	PATROL											
BUCHAREST	26	0700 E	0731 D		N11	E60			1-	2			1.20			
HTE-PROVEN	26	0705	0732		N07	E80	6403	27	1							
BUCHAREST	26	0707 E	0731 D		N10	E70	6403	24 D	2	2			5.70			
CAPETOWN	26	0711	0752	0719	N10	W76	6395	41	1+		0719	1.60				
BUCHAREST	26	0717 E	0728 D		N07	E64			1-	2			1.40			
CAPRI -F	26	1008	1015	1008	N09	E69			1-	2	1009	1.20	2.80			
CAPETOWN	26	1008	1016	1010	N10	W70			1-		1010	.90	2.60			
UCCLE	26	1033 E	1127 D		N08	E70			1-	2						
UCCLE	26	1039 E	1106		N08	E60			1-	2						
CAPETOWN	26	1157	1212	1200	N08	W90			1-		1200	.30				
HTE-PROVEN	26	1201	1230		N03	E62			1-							
CAPETOWN	26	1205	1235	1211	N06	E66	6403	30	2		1211	2.30	6.40			
KIEY KO	26	1206 E	1230 D	1210	N07	E62	6403	24 D	1+	1	1210	4.13			63	
CAPRI -F	26	1208	1232	1211	N06	E63	6403	24	2	2	1211	3.00	6.00			
SCHAUINS	26	1212 E	1226		N04	E65			1-			2.00				
SCHAUINS	26	1212 E	1230		N09	E66	6403	18 D	1			5.00				
UCCLE	26	1216 E	1234		N07	E65	6403	18 D	1	2		4.00	8.00			
	27	0140	0155	NO FLARE	PATROL											
BUCHAREST	27	0700 E	0715 D		N10	E66			1-	1			1.40			
HTE-PROVEN	27	1105	1145		N08	E45			1-							
KHARKOV	27	1115	1155		N06	E47	6403	40	1	2	1130	2.29	2.50	1.70		
CAPETOWN	27	1116	1148	1126	N05	E48	6403	32	1		1126	2.30	3.50			
KIEY KO	27	1123 E	1130 D	1125	N04	E48			1-	1	1125	3.09			56	
CAPRI -F	27	1125	1138	1129	N05	E48	6403	13	1	2	1128	3.00	4.50			

SOLAR FLARES

APRIL 1962

OBSERVATORY	DATE APR 1962	OBSERVED UNIVERSAL TIME START	END	MAX. PHASE	LOCATION APPROX. LAT.	MER DIST	McMATH PLAGE REGION	DURATION — MINUTES	IMPORTANCE	OBS. COND.	MEASUREMENTS TIME — U T	MEAS. AREA Sq. Deg.	CORR. AREA Sq. Deg.	MAX. WIDTH Ha	MAX INT %	PROVISIONAL IONOSPHERIC EFFECT
HTE-PROVEN	27	1346	1426	1407	N07	E50	6403	40	2			4.70	7.30			
CAPRI -F	27	1350	1438	1413	N08	E48	6403	48	3	3	1413	9.00	13.50			S-SWF
CLIMAX	27	1404	1437	1420	N06	E50	6403	33	1			2.40	3.10			
CLIMAX	27	2300	2311	2305	N07	E44			1-			1.20	1.40			
	28	0045	0050	NO FLARE	PATROL											
	28	0055	0125	NO FLARE	PATROL											
ALMA-ATA	28	0243 E	0252 D	0247	N07	E43			1-		0247	1.39			61	
HTE-PROVEN	28	0555	0705		N13	E48			1-							
ISTANBUL	28	0750 E	0840		S08	W90	6397	50 D	2							
CLIMAX	28	2023	2042	2028	N04	E29			1-			.90	.90			
VOROSHILOV	29	0039	0053	0043	N10	E36			1-	2		.63			69	
	29	0630	0635	NO FLARE	PATROL											
UCCLE	30	0834	0848 D		N13	E23			1-	3						
HTE-PROVEN	30	1140	1230	1204	N15	E20	6403	50	1			2.40	2.70			
CAPRI -F	30	1155	1228	1205	N12	E23	6403	33	1	2	1208	4.50	5.00			
UCCLE	30	1159 E	1239	1205	N12	E21	6403	40 D	1	3	1205	3.00	3.90			
HTE-PROVEN	30	1255	1320	1300	N15	E20			1-			1.20	1.30			
UCCLE	30	1303	1349		N12	E19	6403	46	1	3		5.00	6.90			
CAPRI -F	30	1304	1315	1305	N12	E23			1-	2	1304	.50	.60			
UCCLE	30	1539 E	1550 D		N18	E80			1-	3						

These flare reports are addenda to the April 1962 flares published in CRPL-F 213, May 1962.

ATHENES	ATHENS, GREECE
BAKOU	PIRCULI, USSR
CAPETOWN	ROYAL OBSERVATORY, CAPE OF GOOD HOPE
CAPRI F	CAPRI, ITALY (GERMAN)
CAPRI S	CAPRI, ITALY (SWEDISH)
CRIMÉE	SIMEIZ, USSR
HERSTMONCEU	ROYAL GREENWICH OBSERVATORY, HERSTMONCEUX, ENGLAND
HONOLULU	HAWAII, USA
IKOMASAN	KYOTO, JAPAN
KIEV KO	KIEV GAO, USSR
KIEV KY	KIEV UNIVERSITY, USSR
LOCKHEED	LOS ANGELES, CALIF., USA
MCMATH	MCMATH-HULBERT PONTIAC, MICH., USA
MOSCOU	MOSCOW-GAISH, USSR
NERA	NEDERHORST den BERGH, NETHERLANDS
NIZMIR	KRASNAYA PAKHRA, USSR
SAC PEAK	SACRAMENTO PEAK, N.MEX. USA
SALTSJÖBADEN	STOCKHOLM, SWEDEN
SCHAUINS	SCHAUINSLAND, GFR
TACHKENT	TASHKENT, USSR
WENDEL	WENDELSTEIN, GFR

HTE-PROVEN = HAUTE-PROVENCE

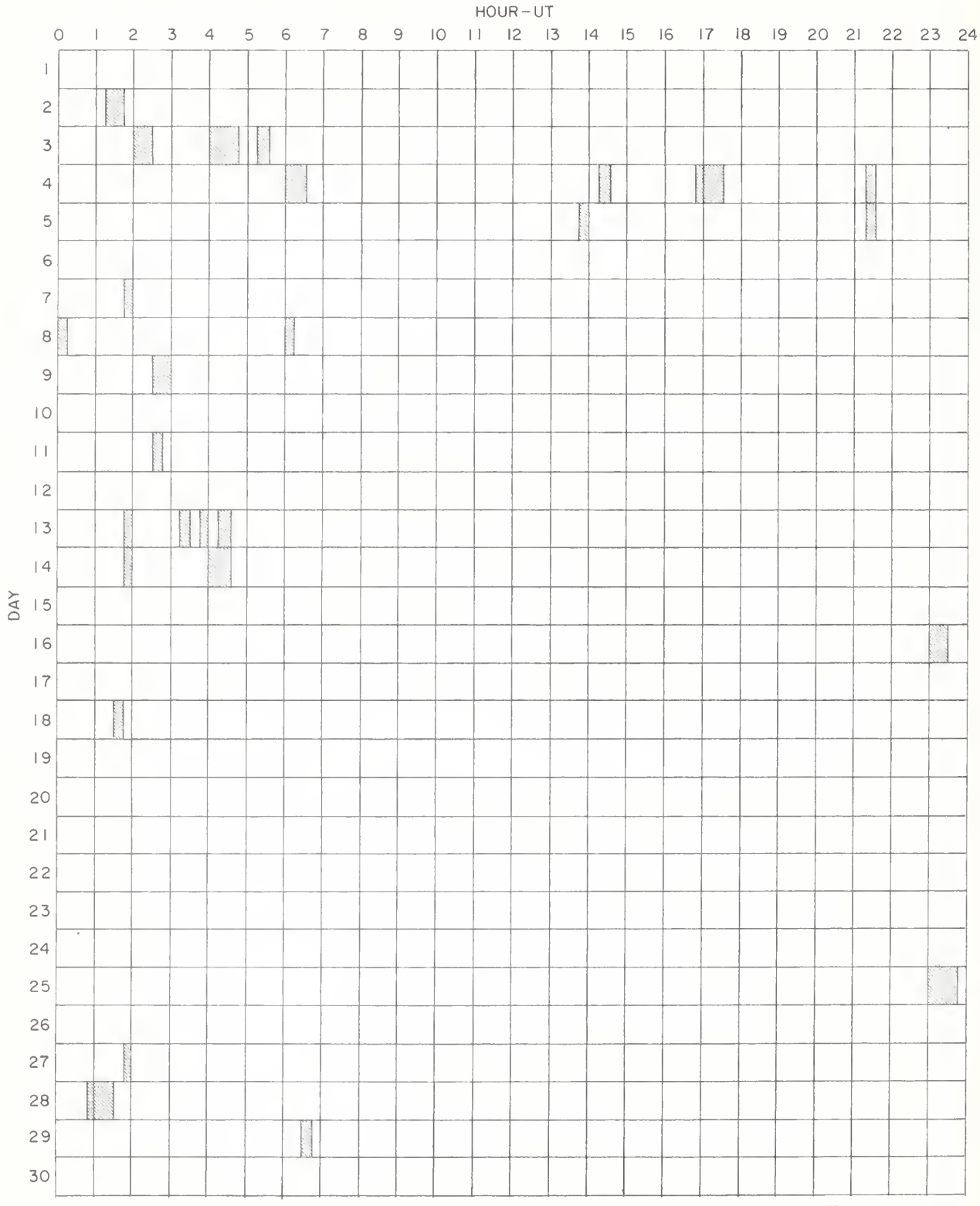
ALL VALUES IN THE MAXIMUM INTENSITY COLUMN FOR SAC PEAK ARE ARBITRARY UNITS (0-40) AND FOR LOCKHEED ARE ARBITRARY UNITS (10-40), NOT PERCENT OF CONTINUOUS SPECTRUM.

SEE DESCRIPTIVE TEXT PUBLISHED NOVEMBER 1961 FOR DEFINITION OF CORRECTED AREA VALUES LISTED FOR CLIMAX, HAWAII, LOCKHEED AND SACRAMENTO PEAK.

E = LESS THAN D = GREATER THAN U = APPROXIMATE = NOT REPORTED.

INTERVALS OF NO FLARE PATROL OBSERVATIONS

APRIL 1962



Stations include:

Abastumani
Alma-Ata
Arcetri
Bakou
Bucharest
Capetown
Capri-F
Capri-G
Climax
Crimée
Haute-Provence
Herstmonceux
Honolulu
Ikomasan
Kharkov
Kiev Ko
Kodaikanal
Lockheed
McMath-Hulbert
Meudon
Mitaka
Moscou
Nizamiah
Nizmir
Ondrejov
Sacramento Peak
Schauinsland
Tachkent
Uccle
Voroshilov
Wendelstein

IONOSPHERIC EFFECTS OF SOLAR FLARES

SHORT WAVE RADIO FADEOUTS
SUDDEN COSMIC NOISE ABSORPTION
SUDDEN ENHANCEMENTS OF ATMOSPHERICS
SUDDEN PHASE ANOMALIES
SOLAR NOISE BURSTS AT 18 Mc

JUNE 1962

JUNE 1962	UNIVERSAL TIME START	END	MAX	SWF TYPE IMP	IMPORTANCE ABS	SCNA	SEA	SPA	BUR	WIDE SPREAD INDEX	STATIONS	KNOWN FLARE
01	2009	2015							1	5	BO MC HA	2006
05	2326	2330							1	5	HA BO MC	
05	2351	2358							1	5	HA BO MC	2352
+ 06	0041	0047							1	5	HA MA	*
07	0000	0025	0010				1			5	HA A10 BO MA TO	2358
+ 07	0000	0029		SL 1+						4	TO OK	
07	0000	0030	0009		15	1				1	HA	
07	2309		2310				1			1	HA A11	2256
+ 07	2309	2330	2315		10	1				3	HA	
11	1559	1604							1	4	MC BO	1559
12	1925	1955	1932				1+			3	A10 A1	*
17	0918							X		1	PU	
17	0918	1031		S 2						3	PU BR	0940E
17	0952	1022						X		1	PU	
17	1717	1725							1	4	MC BO Group of bursts	1716
20	2005	2043	2012				1			1	A3	2002
20	2007	2035	2017		15	1				5	BO HA MC	
20	2007	2100		G 1						4	MC HU PR	
20	2010	2100	2020					18		1	BO+	
25	1450	1530	1500				1			3	A5 A3	1458
25	1458	1503							1	1	MC	
25	1806	1812							2	4	MC BO	
25	1851	1854							1	4	MC BO	
26	1500	0500							1	5	MC BO HA Strongest peaks 1603, 1700, 1906, 2029, 2310	

COMMERCE - STANDARDS - BOULDER

BO+ = Boulder recording GBR for SPA
BR = Breisach, G.F.R.

* = No known flare patrol
\+ = Sudden Enhancement of Signal (NBA or NPM) observed by A5 or A14.

SOLAR RADIO EMISSION
OUTSTANDING OCCURRENCES

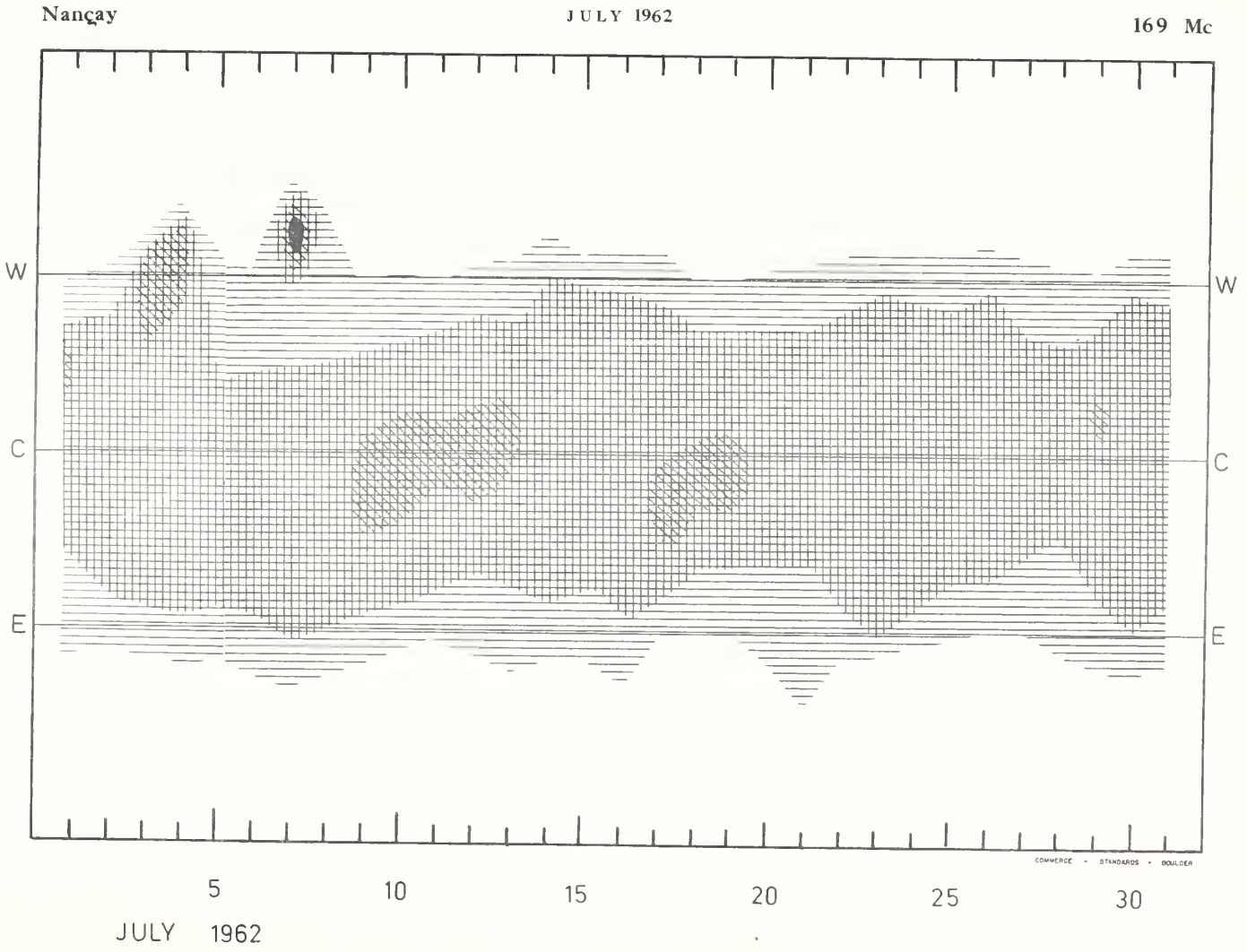
JULY 1962

ARO–OTTAWA

2800 MC

July 1962	Type	Start UT	Duration Hrs:Mins	Maximum			Remarks
				Time UT	Peak Flux	Mean Flux	
4	3 Simple 3	1920	3 10	2053	3	1.5	
5	3 Simple 3 f	1711	33	1714	1.4	0.7	
5	3 Simple 3 f	1934	20	1941	3	1.5	
	5 Absorption	1954	40		-2	-1.3	

SOLAR RADIO EMISSION
INTERFEROMETRIC OBSERVATIONS



SOLAR RADIO EMISSION

JULY 1962

BOULDER 108 Mc.

July 1962	Type	Start UT	Time of Maximum UT	Duration Minutes	Intensity
3	3	2100.8	2101.1	1.0	2
4	7	2019.5	2041.9	92.6	1
12	3	1336.0	1337.0	2.0	2
21	3	1303.9	1304.2	1.0	2
21	3	1716.4	1717.3	1.0	2
25	3	1743.4	1744.0	0.7	2
29	3	1824.7	1825.1	0.7	2

COMMERCE - STANDARDS - BOULDER

NOMINAL TIMES OF OBSERVATION

JULY 1962

BOULDER 108 Mc.

July 1962	U.T.			July 1962	U.T.		
1	1140-0210	I	1810-2250	16	1145-0206	I	1728-0015
2	1140-0210			17	1150-0206		
3	1141-1630;	I	1905-1926;	18	1151-0205	I	1915-2252;
	1730-1926;		2051-0153				0003-0250
	1942-0209			19	1152-0204	I	1933-2127;
4	1141-1413;	I	2203-0205				2209-2215
	1425-0205			20	1152-0204		
5	1142-1230;						
	1245-2021;			21	1153-0203		
	2036-0209			22	1154-0202	I	0018-0055
				23	1155-0015	I	1155-1204;
6	1142-0209	I	2332-0006				1702-0015
7	1143-0208	I	2115-0208	24	1156-0201	I	0115-0201
8	1144-2023;	I	1632-2253;	25	1157-0200	I	1811-2024;
	2036-0208		0107-0208				2057-2134;
9	1144-0208						2150-2226;
10	1145-1633;						2330-0120
	1644-0207						
				26	1157-0159	I	1742-2351
11	1145-0208	I	1145-1317;	27	1158-0159	I	1959-2022
			2118-0118	28	1159-0158	I	2028-2055
12	1146-2133;	I	1758-2331	29	1200-0157	I	2159-2215
	2238-0207			30	1201-0156	I	1646-1725;
13	1147-1442;	I	1734-2300				1837-2126;
	1712-2154;						2209-0021
	2213-0207			31	1202-0155	I	1800-0155
14	1241-0207						
15	1148-0207	I	1955-0207				

COMMERCE - STANDARDS - BOULDER

SOLAR RADIO EMISSION

SPECTRUM OBSERVATIONS

JULY 1962

HAO BOULDER

7.6-41 Mc

Date	Bursts					Bursts			
1962	Type	Time (U.T.)	Intensity	Frequency Range (Mc)	1962	Type	Time (U.T.)	Intensity	Frequency Range (Mc)
1 Jul	III	2225.30-2226.30	1+	10.5-41	20 Jul	III	1644.30-1645	1-	22-41
2	III	1741.30-1742.15	1	20-41		III	1725-1725.30	1	22-41
	III	1743.30-1745	1-	25-41		III	1858.30-1859.15	1-	30-39
	III	1747.30-1748.45	1-	20-41		III	2301.45-2302.45	1+	21-41
	III	2351.30-2351.45	1-	21-31		III	2303.15-2304.15	1+	17-41
3	III	1609-1609.45	1	24-41		III	2307-2307.30	1	21-41
	III	2102.15-2102.45	1+	20-41		III	2451.30-2452.45	1+	18-41
4	III	1700.15-1700.30	1	22-41	21	III	1959-1959.15	1-	24-37
	III	1745.15-1746.30	1	21-41		III	2003-2003.15	1-	27-37
	III	2008-2008.45	1	33-41		III	2038.45-2040.15	1-	25-37
	III	2016.30-2017	1+	21-41	22	III	1702-1702.15	1-	28-38
5	III	1429-1430.45	2-	11-41		III	2134.45-2135.15	1-	24-40
	III	1706.30-1707	1	24-41	23	III	d 1412.30-1413	1-	22-41
	III	1749.45-1752.30	2	7.6-41		III	1554-1555.30	3	19-41
	III	2322.45-2323.30	1-	21-41		III	1609.15-1609.45	2	13-41
	III	2342.45-2343.15	1-	21-41		III	1717.15-1717.45	1-	22-30
	III	2344.15-2344.45	1-	19-34		III	1812.45-1813.15	1	22-41
	III	2345.45-2346.30	1-	21-34		III	1834.15-1834.45	1	23-41
6	III	1418.30-1419.45	1+	8-41		III	1909.30-1910	1	22-41
	III	1704.30-1705.15	1	16-41		III	2021-2021.15	1-	22-41
	III	1936.45-1937.15	1	21-41		III	2023.45-2024	1-	22-41
	III	2009.30-2010.15	1	21-35		III	2026.30-2027	1	7.5-41
	III	2103.15-2103.45	1	20-41		III	2148.30-2148.45	1-	20-41
	III	2105.15-2106	1-	20-38		III	2320.15-2320.30	1	16-41
	III	2106.15-2107	1	16-38	29	III	1842.15-1843	1	22-41
	III	2107.30-2108.15	1-	23-38		III	1844-1845	1-	27-41
	III	2341.45-2342.15	1-	15.5-33		III	1851.30-1853	1-	26-41
20	III	1416.45-1417.30	1+	20-41		III	2525-2525.30	1-	22-36
	III	1455-1456.15	1+	16-33		III	2526.45-2527.15	1-	29-39
	III	1604-1605.30	2	8-41					

d = harmonic structure

COMMERCE - STANDARDS - BOULDER

SOLAR RADIO EMISSION
SPECTRUM OBSERVATIONS

Fort Davis APRIL–MAY **1962** 25-580, 2100-3900 Mc

1962	OBSERVING HOURS	IMPORTANT BURSTS			FREQUENCY RANGE MC	REMARKS
		TYPE	TIMES U T	INT		
Apr. 1	1315-2400					
Apr. 2	1315-2400					
Apr. 3	1315-2400					
Apr. 4	1315-2400					
Apr. 5	1300-2400					
Apr. 6	1300-2400	IIIG	2345-2346	1	320-100	
Apr. 7	1300-2400					
Apr. 8	1300-2400					
Apr. 9	1300-2400					
Apr.10	1300-2400	IIIG	2250-2252	2	250-50	Weak I throughout day
		IIIG	2317-2322	1-3+	500-25	
Apr.11	1300-1620 1626-2400					Weak I throughout day
Apr.12	1300-2400	Uncl	1647-1651	1	80-50	1647: Unclassified, resembles Type II
		IIIG	1719-1722	2-3	350-25	
		IIIG	2148-2156	1-3	450-25	
		IV^{xx}	2201-2213	2-3	580-100	IV^{xx} Continuum with Type III structure
		IIIG	2210-2213	3	580-25	
Apr 13	1300-2400					
Apr.14	1300-2400	IIIG	1400-1406	2	200-150	
		IIIG	1913-1931	1-3+	250-25	Weak I throughout day
Apr.15	1300-2400					Weak I throughout day
Apr.16	1300-2400					Weak I throughout day. ~1640-~2200. Many III 75-25 Mc/s
Apr.17	1300-2400	IIIG	1524-1527	3	350-25	Weak I throughout day. ~1700-~2100. Many weak III
		IIIG	2007-2008	3	140-25	75-25 Mc/s
Apr.18	1300-2400	I	1300-2400	1-2	250-25	~1520-~2000. Many III 75-25 Mc/s
		II	1844.4-1853	2	75-25	
		IV^{xx}	1839-1942	2-3	580-170	IV^{xx} comtinuum with Type III structure
Apr.19	1300-2400	IIIG	2339-2342	2	450-25	Weak I throughout day
		IIIG	2344-2346	2	350-50	
Apr.20	1300-1640	IIIG	2000-2002	2	580-100	Weak I throughout day
	1651-2400	II	2004.6-2019	3	300-25	
Apr.21	1300-2400	IIIG	1920-1926	2	580-25	Weak I throughout day
		IIIG	2007-2011	1-3	320-25	
		II	2021.8-2032	2	120-30	
Apr.22	1300-2400	IIIG	1511-1514	1-3	180-25	
		II	1554.3-1603	3	90-25	
		IIIG	1715-1717	2	180-25	
		IIIG	1820-1821	1	240-100	
Apr.23	1300-2400					
Apr.24	1300-2400					Weak I throughout day
Apr.25	1300-2400	IIIG	2156-2157	3+	~100-25	Weak I throughout day
Apr.26	1300-2400	I	1310-~1506	1	220-150	Weak I throughout day
Apr.27	1300-2400	IIIG	1353-1357	1	300-25	Weak I starts after Type II burst.
		IIIG	1412-1416	3+	580-25	
		II	1414.5-1427	3	240-25	
		IIIG	2300-2305	2	500-25	
Apr.28	1300-2400	IIIG	1556-1559	2	300-25	Weak I throughout day
		IIIG	2024-2032	2-3+	300-25	
Apr.29	1300-2400					
Apr.30	1300-2400					
May 1	1245-2400	II	1919.7-1940	3+	150-25	
		IV	1918-2012	1-2	3000-180	
May 2	1245-2400	IIIG	1529-1522	1	90-50	
		IIIG	1727-1729	2	150-25	
		IIIG	2347-2350	3+	580-25	
May 3	1245-2400					
May 4	1245-2400					
May 5	1246-2400					
May 6	1245-2400					
May 7	1245-2400					
May 8	1245-2400					
May 9	1245-2400					
May 10	1246-2400					
May 11	1247-2400	IIIG	2302-2306	2	450-125	

COMMERCE - STANDARDS - BOULDER

SOLAR RADIO EMISSION SPECTRUM OBSERVATIONS

Fort Davis MAY-JUNE 1962 25-580, 2100-3900 Mc

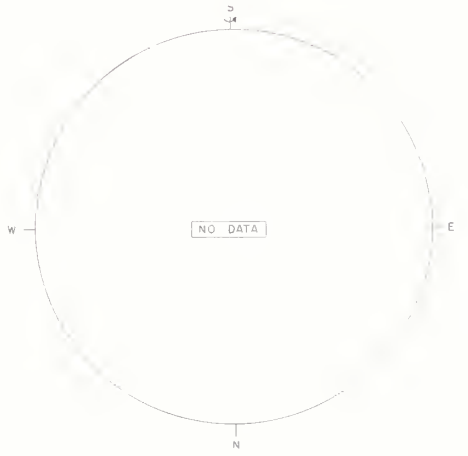
1962	OBSERVING HOURS	IMPORTANT BURSTS			FREQUENCY RANGE MC	REMARKS
		TYPE	TIMES U.T.	INT		
May 12	1246-2400					Weak I throughout day
May 13	1246-2400					Weak I throughout day
May 14	1246-2400					
May 15	1245-2400					
May 16	1246-2400					
May 17	1246-2400					
May 18	1246-2355	IIIG II	1532-1533 1533.3-1538	2 3	280-25 240-50	
May 19	1246-2400					
May 20	1246-2400					
May 21	1246-2400					Weak I throughout day
May 22	1230-2400					Weak I throughout day
May 23	1230-2400					Weak I throughout day
May 24	1230-2110					Weak I throughout day
May 25	1230-2400					Weak I throughout day. ~ 1540->1823 Many III. 100-25 Mc/s
May 26	1230-2400	I	1230-2400	1	250-100	
May 27	1230-2400	IIIG	1517-1519	3+	500-25	Weak I during day
May 28	1230-2400	II IIIG	1640.3-1645 1852-1853	2 2	240-50 150-25	
May 29	1230-2400					
May 30	1230-2400	IIIG IIIG	1633-1639 1936-1942	2 1-2	220-25 200-25	Weak I throughout day
May 31	1230-2400					Weak I throughout day
June 1	1230-2400					Weak I during day
June 2	1230-2400					
June 3	1230-2400					
June 4	1230-2400					
June 5	1230-2400	IIIG	2352-2356	2-3	300-25	
June 6	1233-2400					
June 7	1234-2400					
June 8	1233-2400					
June 9	1233-2400					
June 10	1234-2400					
June 11	1233-2400	IIIG	1600-1604	3+	580-25	
June 12	1233-2400					
June 13	1233-2400					
June 14	1233-2120 2126-2400					
June 15	1236-2400					
June 16	1236-2400					
June 17	1236-2400	IIIG	1718-1720	3	450-25	
June 18	1236-2400					
June 19	1236-2400					
June 20	1222-2400					
June 21	1222-2400					
June 22	1222-2400					
June 23	1223-2400					
June 24	1222-2400	I	~1900-~1930	1	200-125	Weak I throughout day
June 25	1222-2400	I IIIG IIIG	1222-~1450 1521-1523 1808-1810	1 1 3	200-100 240-100 180-25	Weak I throughout day
June 26	1223-2400	IIIG I	2028-2029 ~2035-~2150	3 1	580-25 200-100	Weak I throughout day
June 27	1222-1926 2022-2400	IIIG	1353-1359	1-	240-100	Weak I throughout day
June 28	1222-2400					Weak I throughout day
June 29	1222-2400					
June 30	1222-2400					Weak I throughout day

SOLAR RADIO EMISSION SPECTROHELIOGRAMS

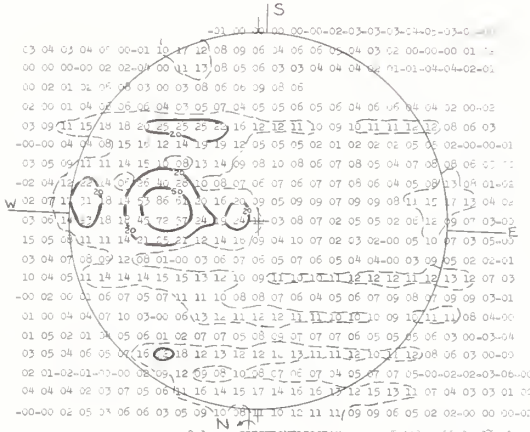
1962

STANFORD

9.1 cm

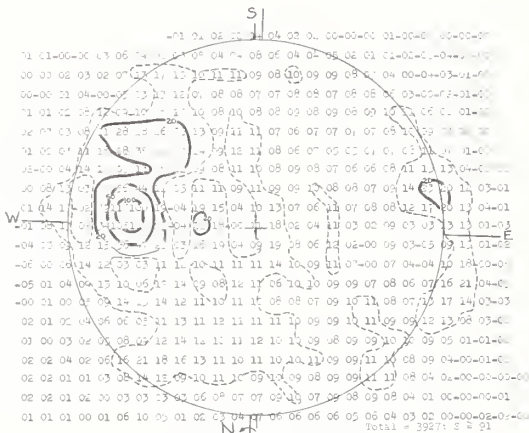


1962 JULY 01



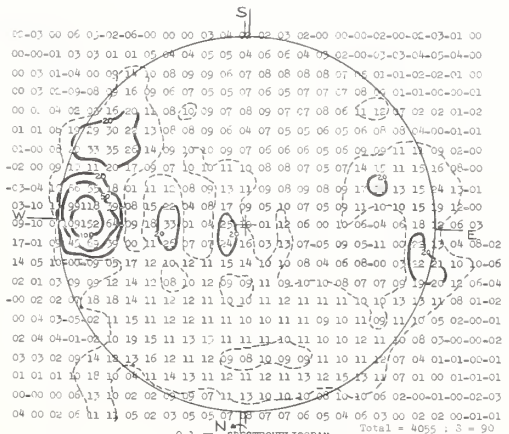
9.1 cm SPECTROHELIOGRAM Total = 5900 ; S = 90

Stanford, 1962 July 02, 20-21 hrs UT; Brightness Unit = [illegible] x 10^3 °K.



9.1 cm SPECTROHELIOGRAM Total = 3927; S = 91

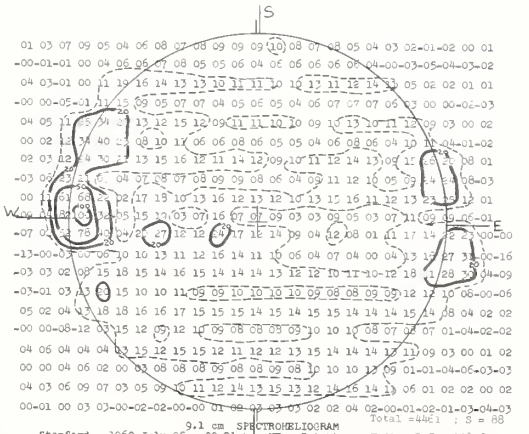
Stanford, 1962 July 03, 20-21 hrs UT; Brightness Unit = [illegible] x 10^3 °K.



9.1 cm SPECTROHELIOGRAM Total = 4055 ; S = 90

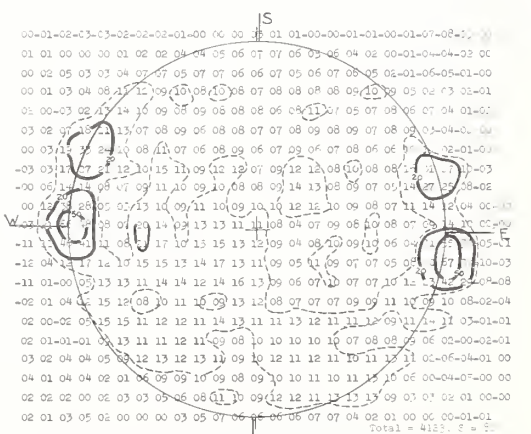
Stanford, 1962 July 04, 20-21 hrs UT; Brightness Unit = 3.0 x 10^3 °K.

ccc



9.1 cm SPECTROHELIOGRAM Total =4461 ; S = 88

Stanford, 1962 July 05, 20-21 hrs UT; Brightness Unit = 2.7 x 10^3 °K.



9.1 cm SPECTROHELIOGRAM Total = 4125 ; S = [illegible]

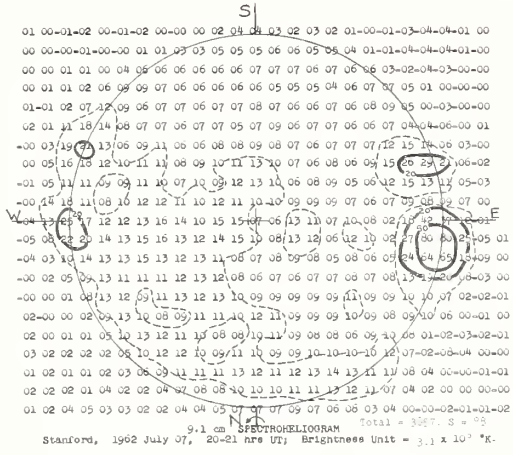
Stanford, 1962 July 06, 20-21 hrs UT; Brightness Unit = [illegible] x 10^3 °K

SOLAR RADIO EMISSION SPECTROHELIOGRAMS

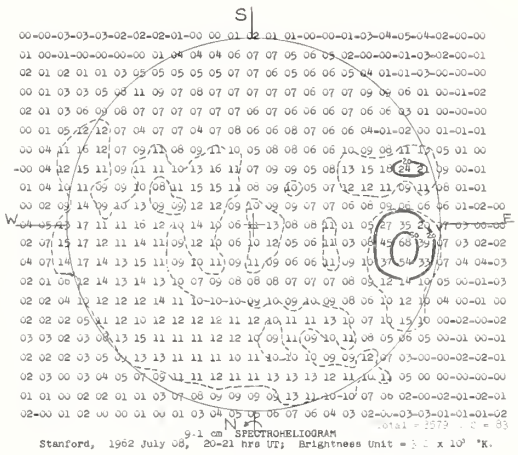
JULY 1962

STANFORD

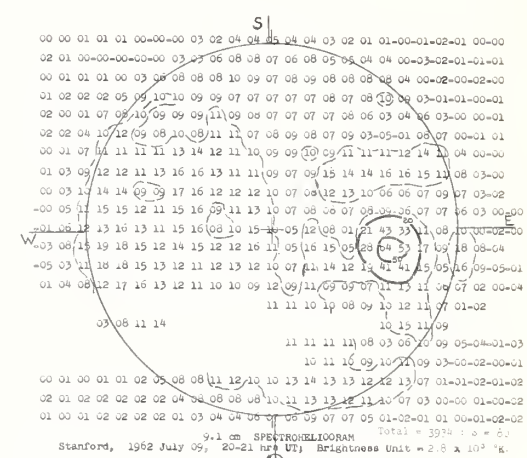
9.1 cm



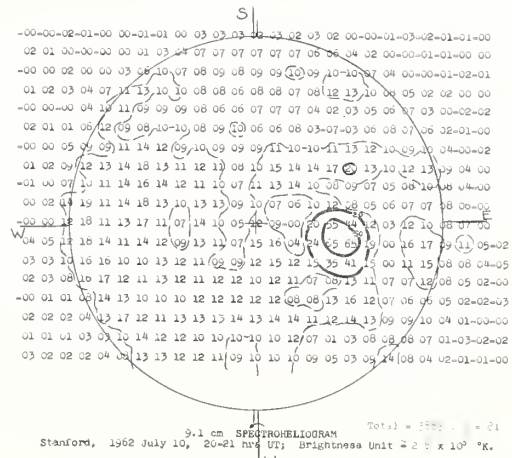
9.1 cm SPECTROHELIOGRAM
Stanford, 1962 July 07, 20-21 hrs UT; Brightness Unit = 3.1 x 10^3 °K.



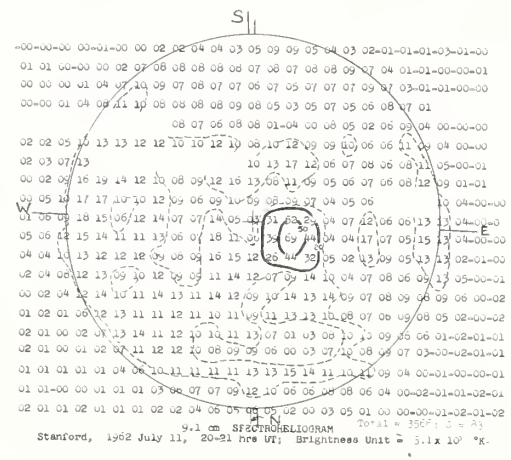
9.1 cm SPECTROHELIOGRAM
Stanford, 1962 July 08, 20-21 hrs UT; Brightness Unit = 3.1 x 10^3 °K.



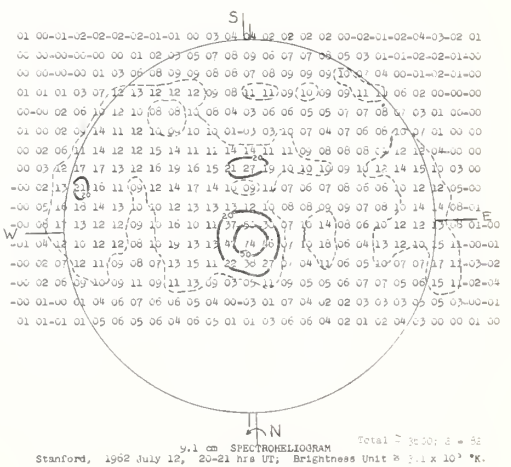
9.1 cm SPECTROHELIOGRAM
Stanford, 1962 July 09, 20-21 hrs UT; Brightness Unit = 2.8 x 10^3 °K.



9.1 cm SPECTROHELIOGRAM
Stanford, 1962 July 10, 20-21 hrs UT; Brightness Unit = 2.9 x 10^3 °K.



9.1 cm SPECTROHELIOGRAM
Stanford, 1962 July 11, 20-21 hrs UT; Brightness Unit = 3.1 x 10^3 °K.



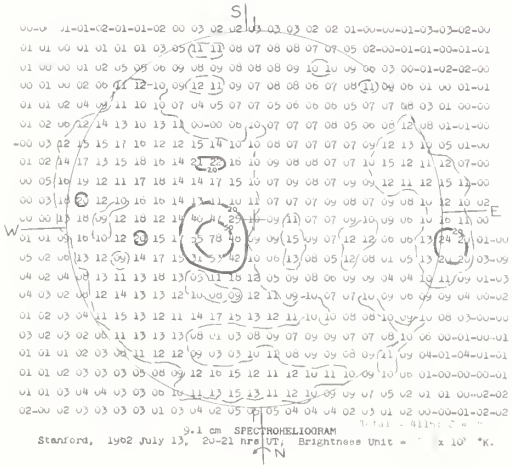
9.1 cm SPECTROHELIOGRAM
Stanford, 1962 July 12, 20-21 hrs UT; Brightness Unit = 3.1 x 10^3 °K.

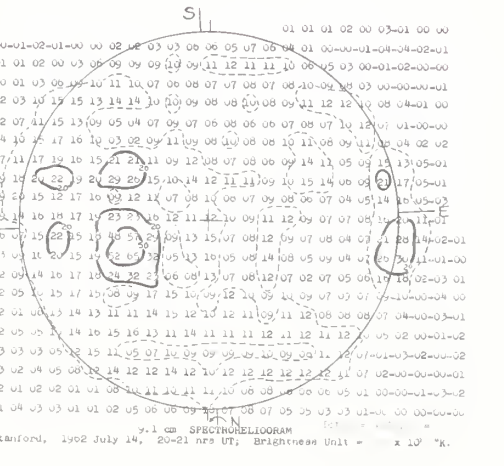
SOLAR RADIO EMISSION SPECTROHELIOGRAMS

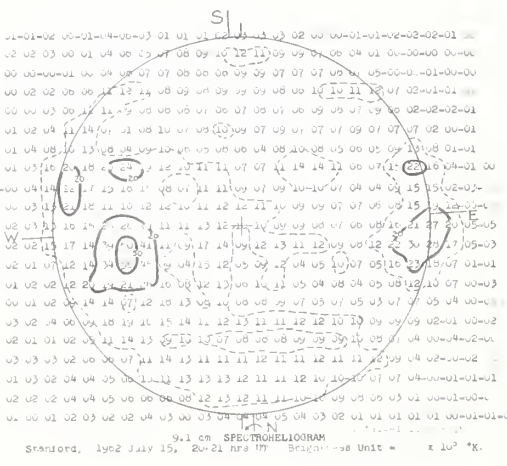
JULY 1962

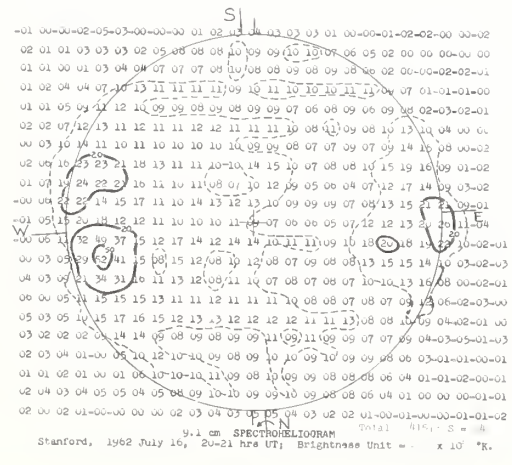
STANFORD

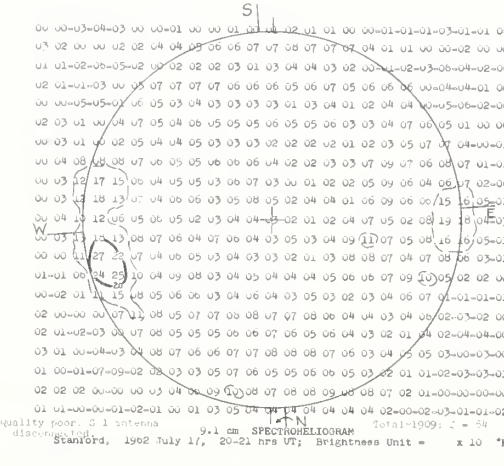
9.1 cm

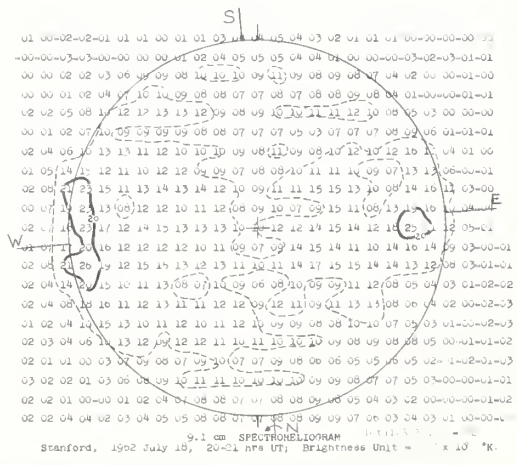










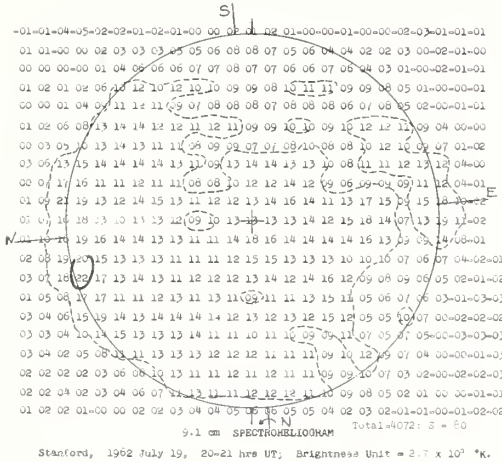


SOLAR RADIO EMISSION SPECTROHELIOGRAMS

JULY 1962

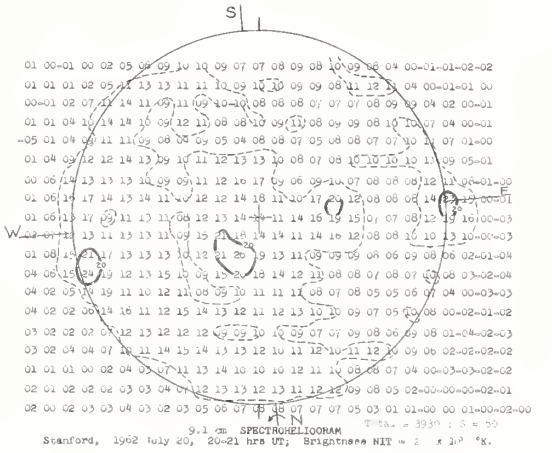
STANFORD

9.1 cm



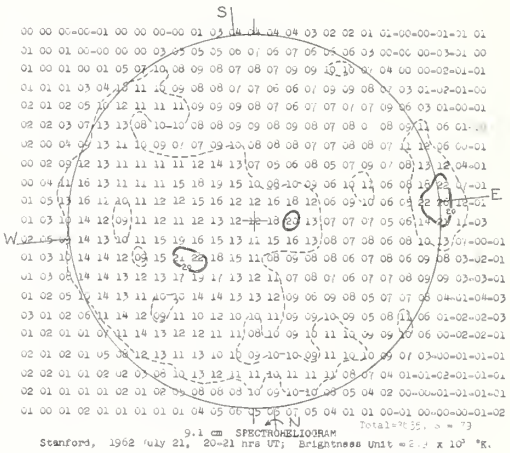
9.1 cm SPECTROHELIOGRAM

Stanford, 1962 July 19, 20-21 hrs UT; Brightness Unit = 2.7 x 10^3 °K.



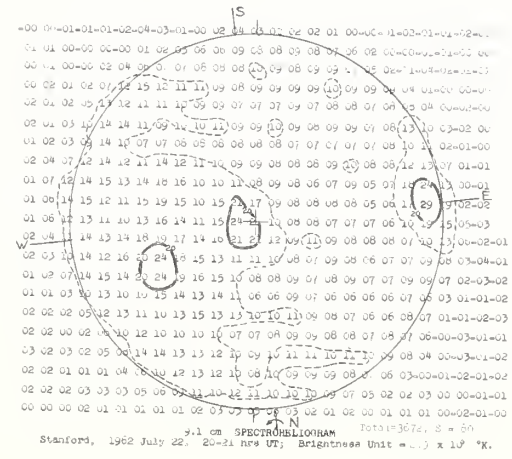
9.1 cm SPECTROHELIOGRAM

Stanford, 1962 July 20, 20-21 hrs UT; Brightness UNIT = 2 x 10^3 °K.



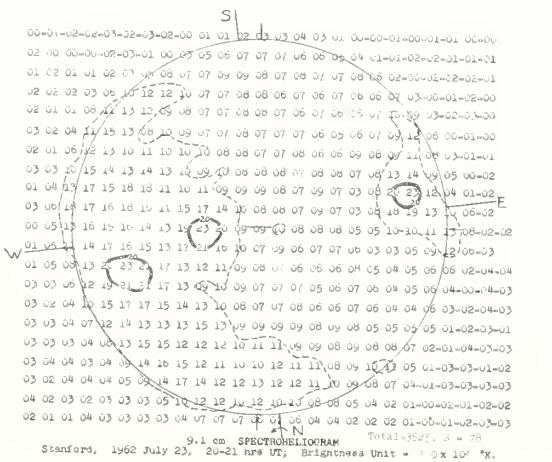
9.1 cm SPECTROHELIOGRAM

Stanford, 1962 July 21, 20-21 hrs UT; Brightness Unit = 2.9 x 10^3 °K.



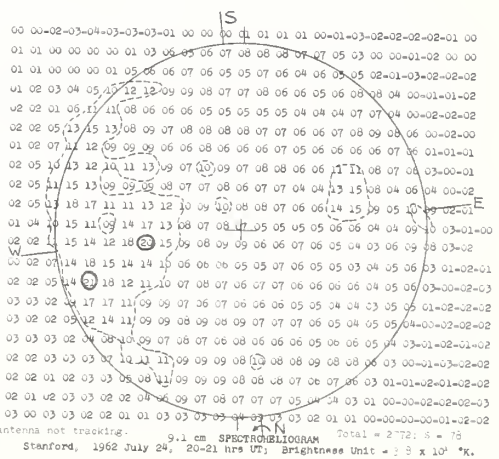
9.1 cm SPECTROHELIOGRAM

Stanford, 1962 July 22, 20-21 hrs UT; Brightness Unit = 2.9 x 10^3 °K.



9.1 cm SPECTROHELIOGRAM

Stanford, 1962 July 23, 20-21 hrs UT; Brightness Unit = 2.9 x 10^3 °K.



N = antenna not tracking.

9.1 cm SPECTROHELIOGRAM

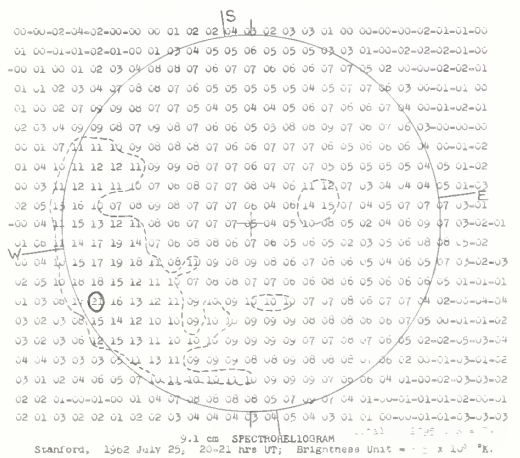
Stanford, 1962 July 24, 20-21 hrs UT; Brightness Unit = 2.9 x 10^3 °K.

SOLAR RADIO EMISSION SPECTROHELIOGRAMS

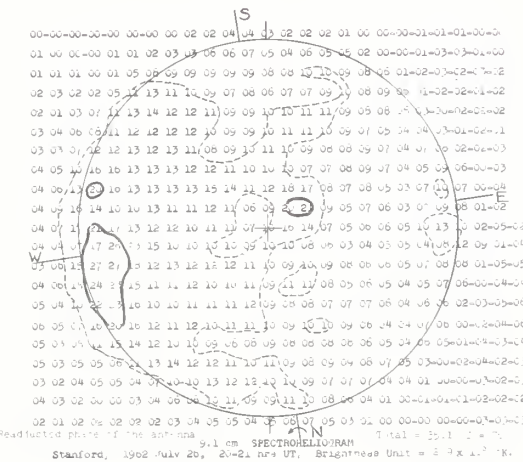
JULY 1962

STANFORD

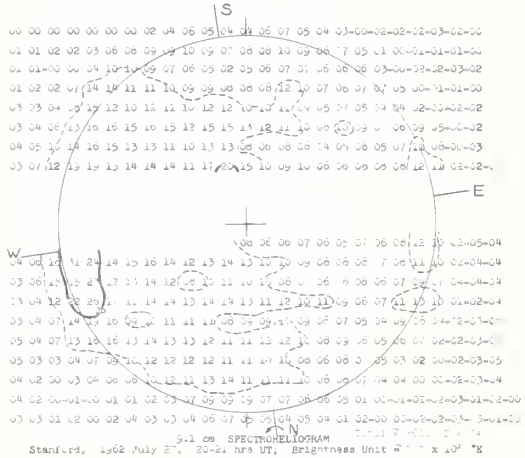
9.1 cm



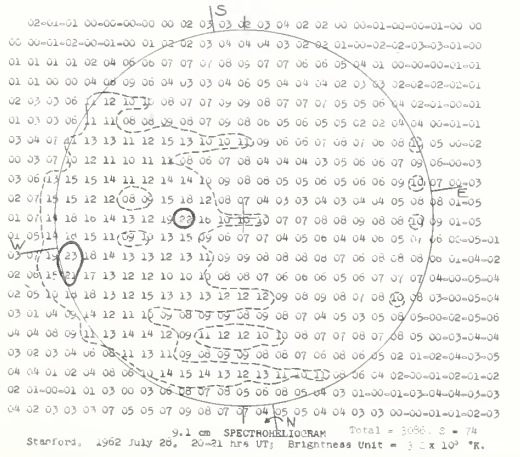
9.1 cm SPECTROHELIOGRAM
Stanford, 1962 July 25, 20-21 hrs UT; Brightness Unit = [illegible] x 10⁴ °K.



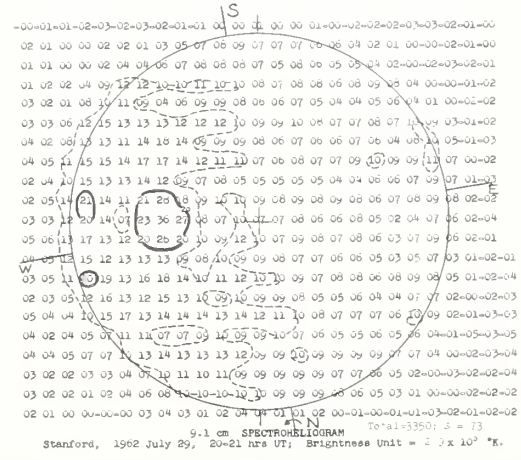
9.1 cm SPECTROHELIOGRAM
Stanford, 1962 July 26, 20-21 hrs UT. Brightness Unit = [illegible] x 10⁴ °K.



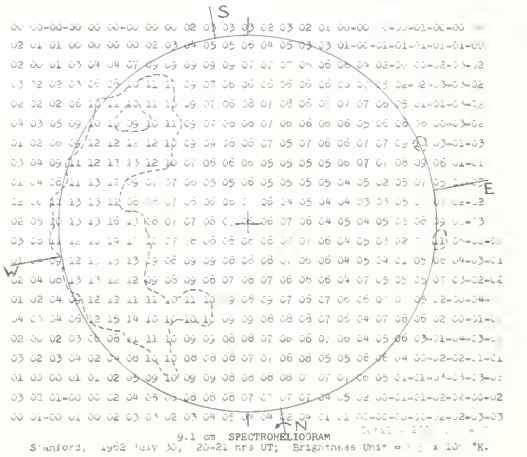
9.1 cm SPECTROHELIOGRAM
Stanford, 1962 July 27, 20-21 hrs UT; Brightness Unit = [illegible] x 10⁴ °K



9.1 cm SPECTROHELIOGRAM
Stanford, 1962 July 28, 20-21 hrs UT; Brightness Unit = [illegible] x 10⁴ °K.



9.1 cm SPECTROHELIOGRAM
Stanford, 1962 July 29, 20-21 hrs UT; Brightness Unit = [illegible] x 10⁴ °K.



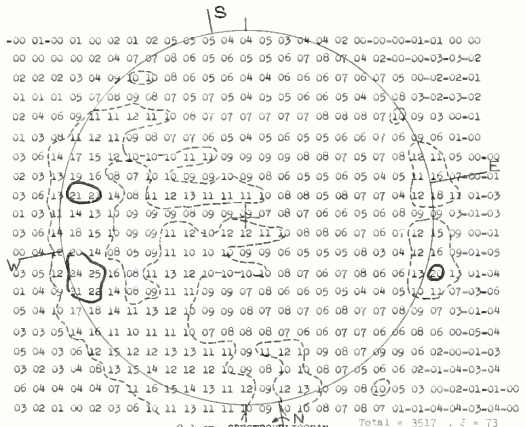
9.1 cm SPECTROHELIOGRAM
Stanford, 1962 July 30, 20-21 hrs UT; Brightness Unit = [illegible] x 10⁴ °K.

SOLAR RADIO EMISSION SPECTROHELIOGRAMS

JULY 1962

9.1 cm

STANFORD



9.1 cm SPECTROHELIOGRAM Total = 3517 . 3 = 73
Stanford, 1962 July 31, 20-21 hrs UT; Brightness Unit = 1.7 x 10^3 °K.

COSMIC RAY INDICES

Climax Neutron Monitor

IGC STATION B 305

JUNE 1962

June 1962	Daily average counts/hr*		June 1962	Daily average counts/hr*	
1	3054.7	+(31)	16	3117.8	
2	3063.4		17	3107.9	
3	3071.2		18	3098.6	
4	3080.8		19	3086.7	
5	3086.9		20	3079.3	+(38)
6	3096.9		21	3084.8	
7	3085.9		22	3087.4	
8	3095.2		23	3079.3	
9	3088.4		24	3059.7	
10	3076.0		25	3061.0	
11	3067.4		26	3060.8	
12	3078.7		27	3064.0	
13	3087.3		28	3050.8	
14	3100.3		29	3049.5	
15	3115.8		30	3049.2	

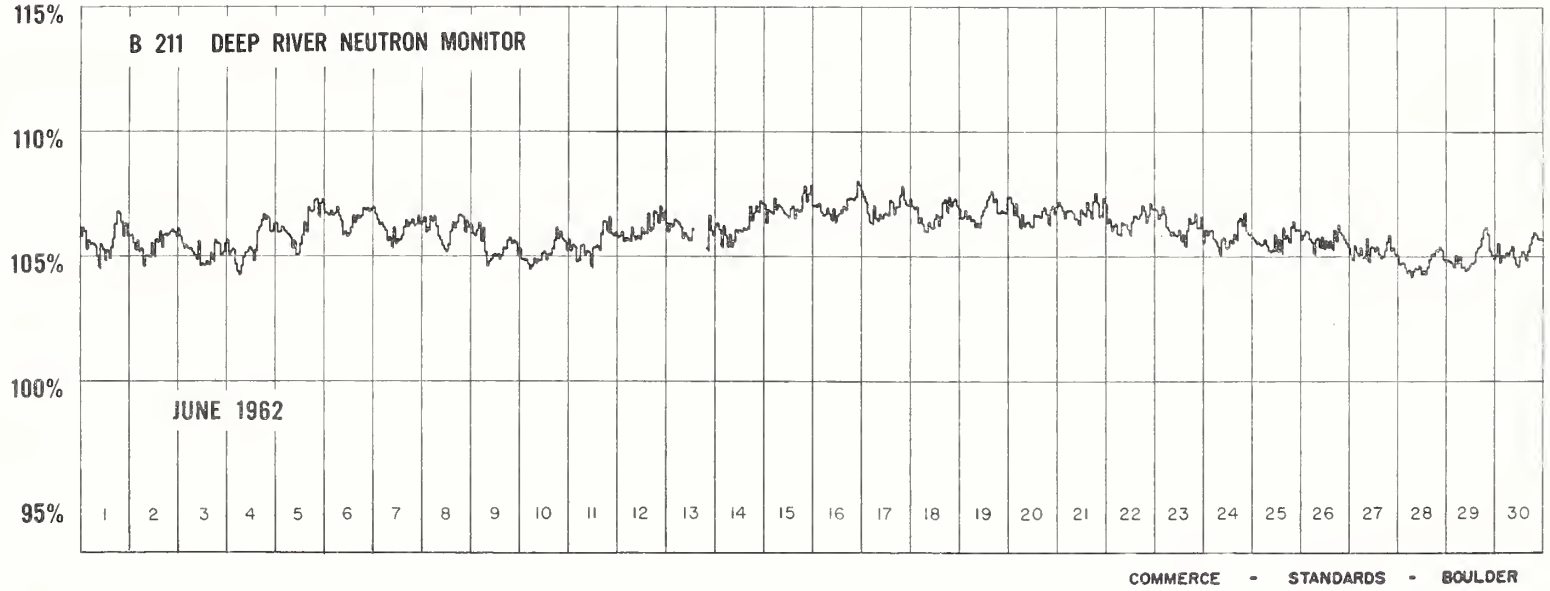
COMMERCE - STANDARDS - BOULDER

*Scaling Factor 128

+ = Number of section hours

COSMIC RAY INDICES

(Pressure Corrected Hourly Totals)

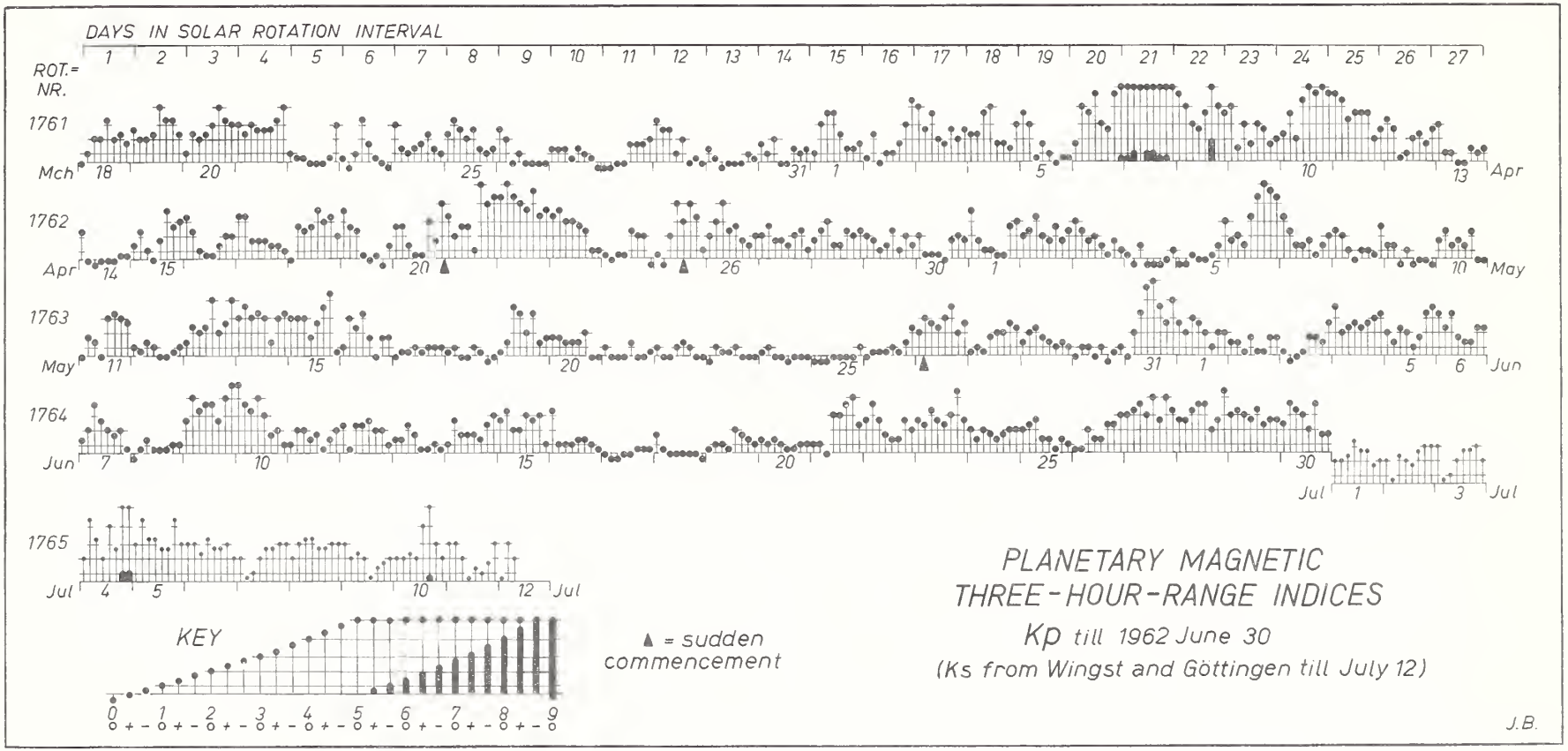


GEOMAGNETIC ACTIVITY INDICES

JUNE 1962

June 1962	C	Values Kp Three hour Gr. interval 1 2 3 4	5 6 7 8	Sum	Ap	Final Selected Days
1	0.7	3- 2o 3o 3-	2o 1o 2o 2o	17+	9	Five
2	0.2	1+ 1+ 1- 2-	1- 1- 2- 2-	10-	5	Quiet
3	0.3	1- 0o 0+ 1-	2- 2- 1+ 3-	9o	5	
4	1.0	4- 2o 2+ 3-	2+ 3- 3o 3+	22o	13	8
5	0.8	2o 1+ 2+ 2o	1o 2- 3+ 4-	17+	10	17
						18
6	0.7	3+ 2+ 3+ 2-	1+ 1+ 2+ 2+	18o	10	19
7	0.8	1+ 2o 4- 3-	2o 2- 2o 1-	16o	9	20
8	0.1	0o 1- 1+ 1-	1- 1- 1o 1o	6o	3	
9	1.2	3- 4o 3+ 4-	4- 3- 4o 5-	29-	22	
10	1.0	5- 4- 3+ 4o	3o 2- 2o 1o	23+	17	
11	0.3	1o 2o 2o 1+	2- 1- 1+ 2o	12o	6	Five
12	0.4	2+ 1- 2+ 2+	3- 2o 2o 1o	15+	8	Disturbed
13	0.2	1+ 1+ 2+ 2-	1- 1- 1o 1-	10-	5	
14	0.3	1o 3- 2- 2-	2- 1+ 2+ 3o	15+	8	9
15	0.8	3- 3+ 2o 2o	3o 3- 3o 1o	20-	11	10
						23
16	0.3	3+ 1o 1o 1o	1+ 1+ 1o 1-	11-	6	27
17	0.0	0+ 0o 0o 0+	0+ 1- 1- 1-	3o	2	28
18	0.1	2- 1- 0+ 0+	0+ 0+ 0+ 0o	4o	2	
19	0.2	1- 1o 1o 1-	2o 2- 1+ 1o	9+	4	
20	0.2	1+ 1o 1+ 1o	1- 1- 1o 1o	8o	4	
21	0.7	1o 1o 0+ 3o	3o 4- 4o 2+	18+	12	Ten
22	0.6	3- 4- 3- 2-	1+ 1+ 3- 2o	18o	10	Quiet
23	1.0	3- 2+ 3+ 3-	2+ 3o 4+ 3-	23+	15	
24	0.4	2o 1+ 2o 2-	1+ 2- 2o 2o	14o	6	2
25	0.3	2o 2+ 3- 1+	1+ 1- 1+ 1o	13-	6	3
						8
26	0.4	1- 1- 2o 1+	1+ 2+ 2+ 3o	14-	7	11
27	1.1	3o 3+ 4- 3o	4o 3- 4o 3+	27o	19	13
28	1.2	3- 3- 3+ 4-	4- 2o 3- 4+	25o	17	16
29	0.8	3o 3+ 3o 3-	3+ 2+ 3- 3-	23o	14	17
30	0.9	2+ 4- 3+ 3o	2o 4- 2- 2-	21+	13	18
						19
						20
Mean:	0.57			Mean:	9	

COMMERCE - STANDARDS - BOULDER



COMMERCE - STANDARDS - BOULDER

CRPL RADIO PROPAGATION QUALITY FIGURES AND FORECASTS

JUNE 1962

NORTH ATLANTIC

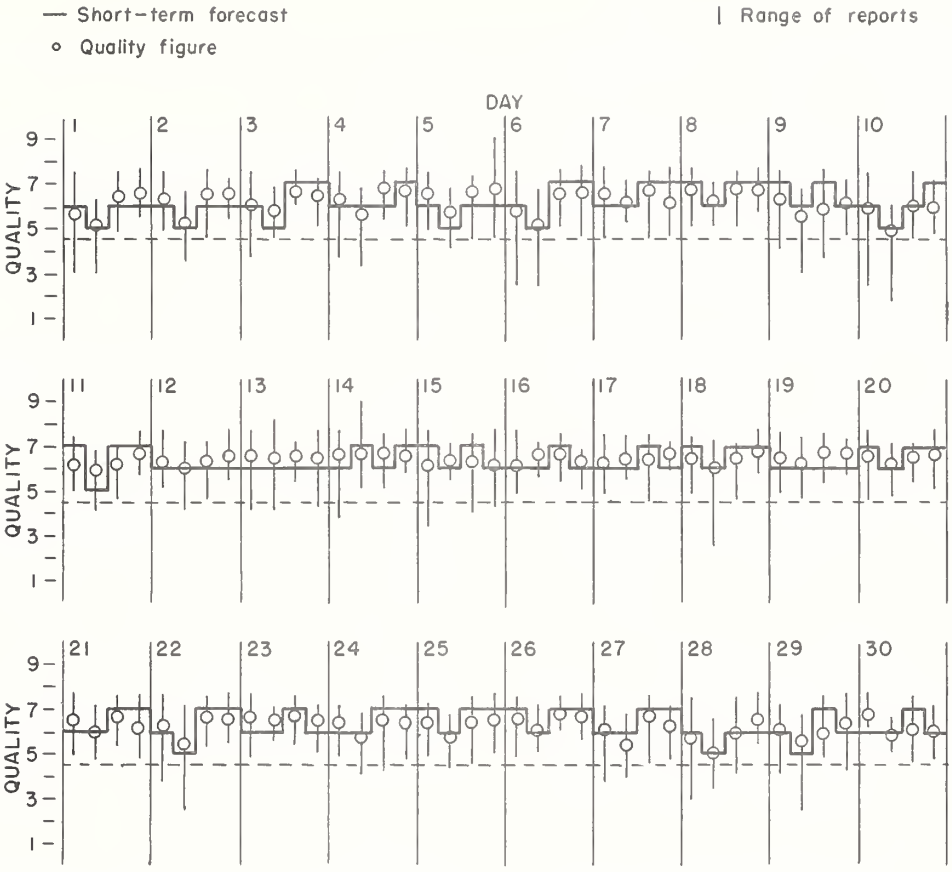
JUNE 1962	NORTH ATLANTIC 6-HOURLY QUALITY FIGURES				SHORT-TERM FORECASTS ISSUED ABOUT ONE HOUR IN ADVANCE OF				WHOLE DAY INDEX	ADVANCE FORECASTS (J) REPORTS FOR WHOLE DAY, ISSUED IN ADVANCE BY		GEOMAGNETIC FOR		NORTH PACIFIC 6-HOURLY QUALITY FIGURES		SHORT-TERM ZONE AVG. ISSUED AT		WHOLE DAY INDEX	ADVANCE FORECASTS (J) REPORTS FOR WHOLE DAY, ISSUED IN ADVANCE BY		GEOMAG. FOR	
	00 TO 06	06 TO 12	12 TO 18	18 TO 24	00	06	12	18		1-7 DAYS FINAL J_{FS}	1-7 DAYS SDW J_D	HALF DAY (1)	HALF DAY (2)	0000 TO 0600	0600 TO 1200	0600	1800		1-7 DAYS FINAL J_{PS}	1-7 DAYS SDW J_D	HALF DAY (1)	HALF DAY (2)
01	6-	5o	6+	7-	6	5	6	6	6o	5	5	3	2	5	6	4	5	5	6	6	3	2
02	6+	5+	7-	7-	6	5	6	6	6+	5	5	2	1	6	6	5	6	6	6	6	2	0
03	6o	6-	7-	6+	6	5	7	7	6+	5	5	0	2	6	7	6	5	7	6	6	1	1
04	6+	6-	7-	7-	6	6	6	7	6+	6	6	3	3	6	7	5	5	6	6	6	3	2
05	7-	6-	7-	7-	6	5	6	6	7-	6	6	3	3	6	6	5	5	7	6	6	2	2
06	6-	5o	7-	7-	6	5	7	7	6+	6	6	3	2	5	6	6	5	5	6	6	3	2
07	7-	6+	7-	6+	6	6	7	7	6+	6	6	3	2	5	6	6	6	5	6	6	2	2
08	7-	6+	7-	7-	7	6	7	7	7-	6	6	1	1	6	6	6	6	6	6	6	1	1
09	6+	6-	6o	6+	7	6	7	6	6o	6	6	(4)	(4)	5	5	4	6	5	6	6	(4)	3
10	6o	5o	6o	6o	6	5	6	7	6-	6	6	(4)	2	5	6	5	5	5	6	6	(4)	2
11	6+	6o	6+	7-	7	5	7	7	6+	6	6	3	2	5	6	6	5	5	6	6	2	2
12	6+	6o	6+	7-	6	6	6	6	6+	6	6	2	2	5	6	6	5	5	6	6	2	2
13	7-	6+	7-	6+	6	6	6	6	7-	6	6	2	1	6	6	6	6	6	6	6	2	1
14	7-	7-	7-	7-	6	7	6	7	7-	6	6	2	2	5	6	6	6	6	6	6	2	2
15	6+	6+	6+	6+	7	6	7	6	6+	6	6	3	2	6	6	5	6	6	6	6	3	2
16	6+	7-	7-	6+	6	6	7	6	7-	6	6	2	1	6	5	5	6	6	6	6	2	1
17	6+	6+	6+	7-	6	6	7	6	7-	7	7	0	1	6	6	6	6	6	6	6	0	0
18	6+	6o	6+	7-	7	6	7	7	6+	7	7	1	1	6	5	6	6	6	6	6	0	0
19	7-	6+	7-	7-	6	6	6	6	7-	7	7	1	2	6	6	4	6	6	6	6	1	1
20	7-	6+	7-	7-	7	6	7	7	7-	7	7	2	1	5	6	6	6	6	6	6	1	1
21	7-	6o	7-	6+	6	6	7	7	6+	7	7	2	3	5	6	6	6	6	6	6	1	2
22	6+	5+	7-	7-	6	5	7	7	6+	7	7	3	2	5	6	5	6	6	6	6	2	2
23	7-	7-	7-	7-	6	6	7	6	7-	6	6	3	3	5	6	6	6	6	6	6	2	2
24	6+	6-	7-	6+	6	6	7	7	6+	6	6	2	2	5	6	6	6	6	6	6	2	1
25	6+	6-	6+	7-	7	6	7	7	6+	6	6	2	1	4	6	6	6	6	6	6	2	1
26	7-	6+	7-	7-	7	6	7	7	7-	7	7	1	3	5	6	6	6	6	6	6	1	2
27	6o	5+	7-	6+	6	6	7	7	6+	7	7	(4)	(4)	4	5	6	6	5	6	6	(4)	(4)
28	6-	5o	6o	7-	6	5	6	6	6o	5	5	3	3	5	6	5	5	5	5	5	(4)	2
29	6+	6-	6o	6+	6	5	7	6	6o	6	6	(4)	3	5	5	5	6	5	6	6	3	2
30	7-	6o	6+	6o	6	6	7	6	6+	6	6	3	3	5	6	4	5	5	6	6	(4)	2
Score: Quiet Periods				P	17	23	16	16		16	16					10	15		18			
				S	13	7	14	14		14	14					17	13		12			
				U	0	0	0	0		0	0					0	2		0			
				F	0	0	0	0		0	0					1	0		0			
Disturbed Periods				P	0	0	0	0		0	0					0	0		0			
				S	0	0	0	0		0	0					0	0		0			
				U	0	0	0	0		0	0					0	0		0			
				P	0	0	0	0		0	0					2	0		0			

NORTH PACIFIC

CRPL RADIO PROPAGATION QUALITY FIGURES AND FORECASTS

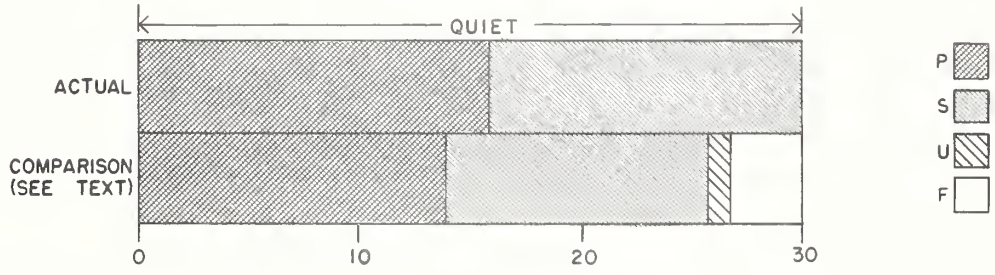
NORTH ATLANTIC

JUNE 1962

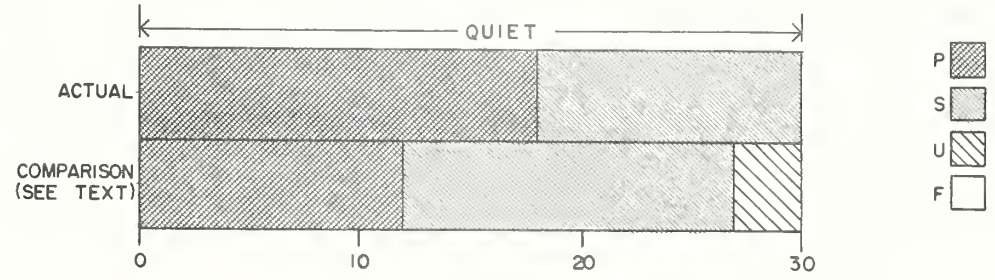


OUTCOME OF ADVANCED FORECASTS FINAL ESTIMATE

NORTH ATLANTIC

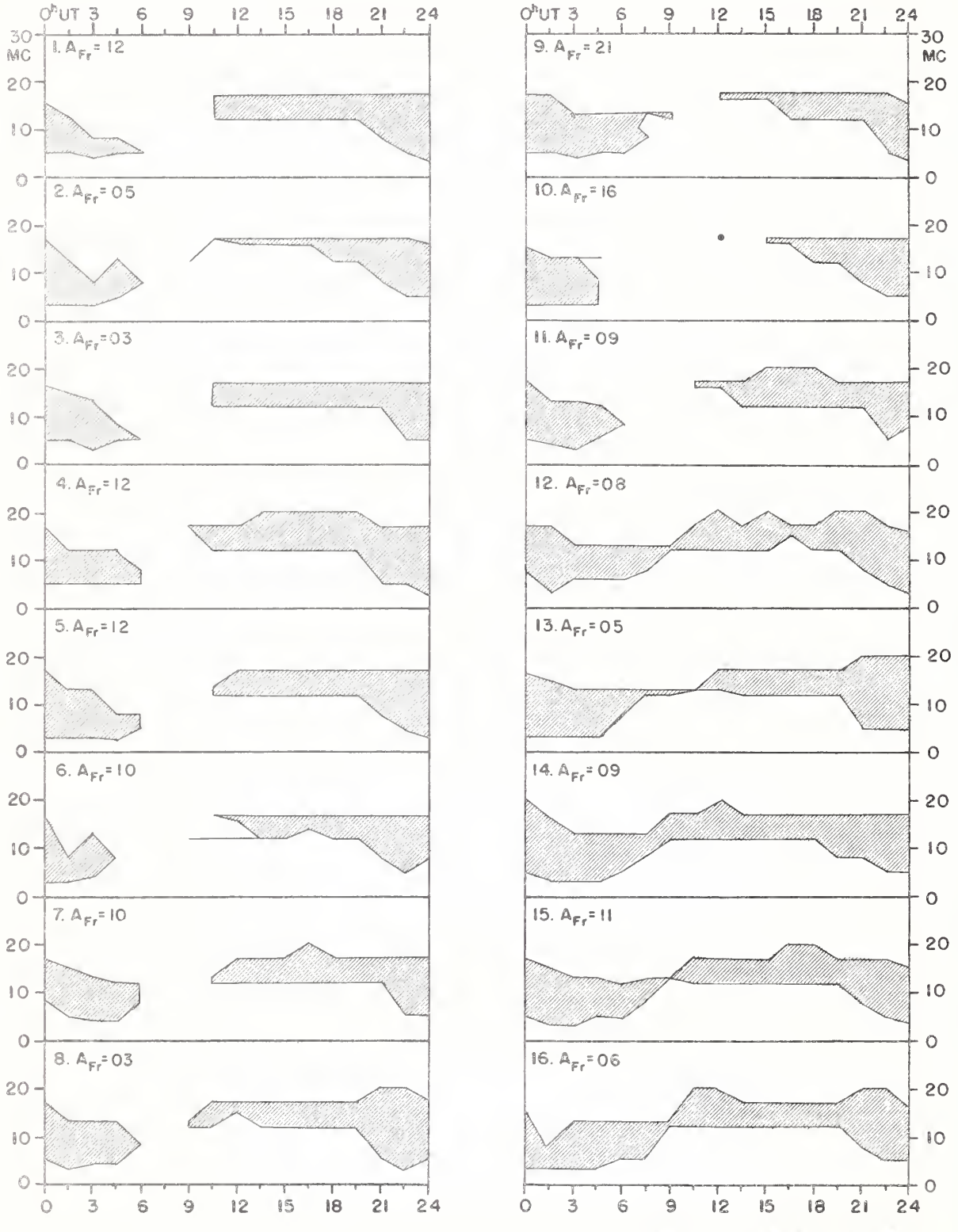


NORTH PACIFIC



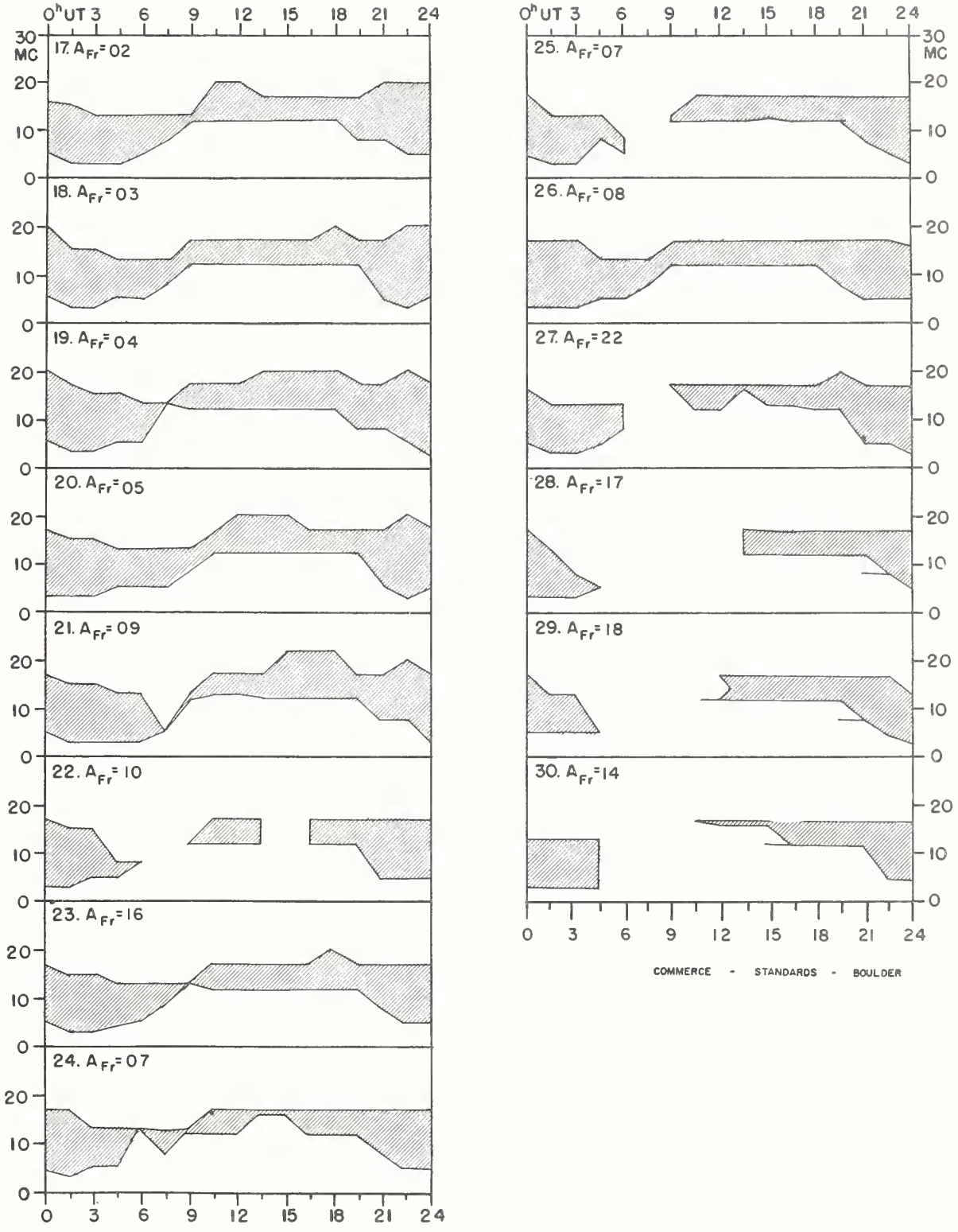
USEFUL FREQUENCY RANGES -- NORTH ATLANTIC PATH

JUNE 1962



USEFUL FREQUENCY RANGES -- NORTH ATLANTIC PATH

JUNE 1962



Adapted from Observations by Deutsches Bundespost

ALERT PERIODS AND SPECIAL WORLD INTERVALS

INTERNATIONAL WORLD DAY SERVICE

JULY 1962

Issued July 1962 Day/Time U.T.	Advance Geophysical Alert	No.	World-Wide Geophysical Alert	Special World Intervals
06/0232	Climax, Solar Flare, Two 05/1937Z			
26/1600		169	Magnetic Storm 25/22XXZ	Start
27/1600		170		Finish
29/1840	Lockheed, Solar Flare, Two 29/1815Z			

COMMERCE - STANDARDS - BOULDER

Erratum:

It has just come to our attention that in CRPL-F 200 Part B April 1961 on p.VIIIa, the World-wide Geophysical Alert No. 115 is incorrectly dated. The "Finish Special World Interval" statement was issued March 28 at 1600 UT.